

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
SAN FRANCISCO BAY REGION**

**ORDER NO. R2-2003-0051**

**NPDES PERMIT NO. CA0030058**

**REISSUING WASTE DISCHARGE REQUIREMENTS FOR:  
BOTTLING GROUP, LLC  
HAYWARD, ALAMEDA COUNTY**

**FINDINGS**

The California Regional Water Quality Control Board, San Francisco Bay Region, hereinafter called the Board, finds that:

1. *Discharger and Permit Application.* The Bottling Group, LLC (hereinafter called the Discharger), formerly the New Century Beverage Company, has applied to the Board for reissuance of waste discharge requirements and a permit to discharge treated wastewater to waters of the State and the United States under the National Pollutant Discharge Elimination System (NPDES).

**Facility Description**

2. The Discharger manufactures and distributes bottled water and soft drinks in Hayward, and employs approximately 375 full-time personnel. For production, municipally supplied potable water is purified through a number of steps, including filtration, dechlorination, and demineralization using two reverse osmosis (R/O) units. A concentrate stream from the R/O units, is discharged to the Alameda County Flood Control and Water Conservation District Zone 3 Line A (ACFCWCD Flood Channel) at latitude 37°36'54" and longitude 120°5'4". The discharge averages 110,000 gallons per day (gpd), and may be up to an instantaneous maximum of 180,000 gpd.
3. The U.S. EPA and the Board have classified this Discharger as a minor discharger.

**Purpose of Order**

4. This NPDES permit regulates the discharge of concentrate (brine, or reject water) from the R/O system. Waste Discharge Requirements Order No. 97-007, adopted by the Board on January 15, 1997, used to govern this discharge. This Order rescinds the requirements of Order No. 97-007.

**Discharge Description**

5. The Discharger uses potable water supplied by the City of Hayward (City) that originates either from Sierra Nevada snowmelt that collects at the Hetch Hetchy Reservoir and is transported via an aqueduct to the San Francisco Bay Area, or from local reservoir water that has been treated by the Sunol Valley Water Treatment Plant (Sunol). The incoming City water contains minerals and metals, and residual chlorine, whose concentration varies based on the chlorination dose at the treatment plant as well as the mixing ratio between the Sunol treated water and the Hetch Hetchy unfiltered water. The quantity and quality of the incoming City water used are important aspects of the Discharger's production, as well as the water quality of the discharge.

6. The feed water entering the facility is purified for the purpose of manufacturing soft drinks and bottled water. The Discharger treats the feed water to reduce dissolved solids, adjust pH, and disinfect. The treatment system includes particulate filtration, R/O, and chemical addition. A diagram of the discharge facility treatment process is shown in Attachment B. The raw water purification system consists of the following steps:
  - Filtration through three Greensand Filters to remove solids, soluble iron, and manganese. A Greensand Filter is a pressure vessel with a filtration bed consisting of an upper layer of anthracite and a bottom layer of manganese greensand. The Greensand Filters are regenerated yearly or as required with potassium permanganate.
  - R/O pretreatment by injection of an antiscalant to prevent membrane fouling, and sodium metabisulfite to reduce the oxidizing effects of chlorine on the R/O membranes;
  - Pre-filtration using three 304 stainless steel cartridge filters each containing 12, 5-micron filter cartridges to remove suspended solids;
  - R/O to remove dissolved minerals from the influent water;
  - Carbon tower filtration of the R/O permeate with granular activated carbon (GAC) to remove trihalomethanes and other taste, color, and odor producing organic molecules by adsorption. The carbon tower is regenerated quarterly;
  - Polishing filtration of the R/O permeate using cartridge elements to remove GAC fines after carbon filtration; and
  - Ultraviolet (UV) sterilization of the R/O permeate to kill bacteria in the final product water.
7. The R/O units remove dissolved minerals from the influent water by passing the influent stream through a sheet of semi-permeable membranes. The R/O system uses pressure to drive water through a microporous membrane against the force of osmotic pressure. Water forced through the membrane is stripped of inorganic ions and organic molecules. The mineral rich side of the stream is termed the concentrate or reject. Water that passes through the membrane is called permeate or product. R/O removes up to 99% of the mineral content of the influent water stream.
8. The Discharger's R/O system is rated to process a maximum influent stream of 900,000 gallons per day (625 gallons per minute) at full operation. Approximately 80% of the influent flow (720,000 gpd) is produced as permeate and piped to a storage tank called the Clearwell for production and other in-house uses. Approximately 20% of the flow (180,000 gpd maximum flow) can be discharged as R/O concentrate. The concentrate is discharged to an onsite storm drain system that connects with an offsite 84-inch County storm sewer main and leads to the wet well of the Alameda County Besco Pump Station and is then lifted and discharged to the ACFCWCD Flood Channel, which drains to Old Alameda Creek, and ultimately flows into San Francisco Bay.
9. The table below presents the quality of the discharge, as indicated in the Discharger's self-monitoring reports submitted for the period from January 2000 through September 2002. Average values represent the average of actual detected values only.

Parameter	Average	Maximum
pH, standard units	--	6.4 – 8.5 <sup>1</sup>
Temperature, degrees C	15.7	20.4
TSS, mg/L	1.5	2
TDS, mg/L	354	5430

Parameter	Average	Maximum
Residual chlorine, mg/L	0.09	0.168
Antimony, µg/L	0.91	2.9
Arsenic, µg/L	1.07	1.6
Cadmium, µg/L	0.04	0.05
Chromium (III), µg/L	2.32	6.4
Copper, µg/L	5.1	12
Lead, µg/L	0.99	1.3
Mercury, µg/L	0.002 <sup>2</sup>	0.002 <sup>2</sup>
Nickel, µg/L	2.53	3.7
Silver, µg/L	0.15	0.15 <sup>3</sup>
Thallium, µg/L	0.01	0.01 <sup>3</sup>
Zinc, µg/L	20	26
Chloroform, µg/L	93	110
Dichlorobromomethane, µg/L	4.75	7.2
Methyl bromide, µg/L	8.4	8.4 <sup>4</sup>

<sup>1</sup> This represents the range of pH values. There was one exceedance of the effluent limitation.

<sup>2</sup> Based on the single available ultra-clean mercury measurement.

<sup>3</sup> All detected values were the same value.

<sup>4</sup> There was only one detected value for methyl bromide.

Total suspended solids concentrations during January 2000 through September 2002 were above detection levels in three of 33 samples. Detected concentrations ranged from 1 mg/L to 2 mg/L. Residual chlorine concentrations were above detection levels in three of 34 samples. Detected concentrations ranged between 0.056 mg/L and 0.168 mg/L.

10. *Residual Chlorine.* The Board issued Complaint No. R2-2002-0052 to the Discharger on May 15, 2002, based on findings of two violations of the residual chlorine effluent limitation (0.0 mg/L) contained in Order No. 97-007. The Discharger requested to conduct a residual chlorine attenuation study and submit the results to the Board, for consideration of sampling frequency and sampling location.

Based on the final report (Weiss Associates, January 2003), the Board finds that monthly monitoring, and regular inspection of the dechlorination system, is sufficient for determining compliance. Among the factors considered are: 1) Residual chlorine of influent water is relatively low (average of 0.62 mg/L, maximum of 1.0 mg/L), which minimizes risk of high residual chlorine in effluent; 2) The greensand filters and storm drain interceptor exert chlorine demand and thus significantly remove the residual chlorine of the influent (by 70 percent or more); 3) Chlorine is not added to the process, eliminating the risk found at traditional waste water treatment plants, where dosing of chlorine can lead to very high residual chlorine; 4) The ratio of sodium metabisulfite to residual chlorine is over twice that required for complete reaction; and 5) The sodium metabisulfite pumps have an alarm mechanism, by which influent/discharge is immediately stopped if they fail.

## Applicable Plans, Policies and Regulations

### *Basin Plan*

11. The Board adopted a revised Water Quality Control Plan for the San Francisco Bay Basin (Basin Plan) on June 21, 1995. This updated and consolidated plan represents the Board's master water quality control planning document. The revised Basin Plan was approved by the State Water

Resources Control Board (SWRCB) and the Office of Administrative Law on July 20, 1995 and November 13, 1995, respectively. A summary of the regulatory changes is contained in Title 23 of the California Code of Regulations, Section 3912. The Basin Plan identifies beneficial uses and water quality objectives (WQOs) for waters of the state in the Region, including surface waters and groundwaters. The Basin Plan also identifies discharge prohibitions intended to protect beneficial uses. This Order implements the Board's Basin Plan.

***Beneficial Uses***

12. This NPDES permit protects all beneficial uses of the receiving water (ACFCWCD Flood Channel) and of downstream waterbodies, such as the Old Alameda Creek. Protection of the beneficial uses of specifically named waterbodies and its tributaries is based on Chapter 2 of the Basin Plan. The beneficial uses designated in the Basin Plan for Alameda Creek and its tributaries include:
  - a. Agricultural Supply
  - b. Cold Freshwater Habitat
  - c. Groundwater Recharge
  - d. Fish Migration
  - e. Water Contact Recreation
  - f. Non-Contact Water Recreation
  - g. Fish Spawning
  - h. Warm Freshwater Habitat
  - i. Wildlife Habitat

***Discharge Prohibition Exception***

13. The Basin Plan contains a prohibition of discharge of any wastewater which has particular constituents of concern to beneficial uses (1) at any point at which the wastewater does not receive a minimum initial dilution of at least 10:1; or (2) into any non-tidal water, dead-end slough, similar confined waters, or immediate tributaries thereof. In issuing the previous Order, the Board determined that these three prohibitions would not apply to the discharge because the discharge did not contain particular constituents of concern to beneficial uses, provided the discharge limitations contained in the Order are met. For this Order, the Board determines the exception from the discharge prohibition continues to be appropriate. Priority pollutants will specifically not be present in the discharge at levels of concern to beneficial uses because the reasonable potential analysis (as described in Findings 31 to 36) indicates that: (1) only copper and lead are currently observed in the discharge at levels that could cause exceedances of water quality criteria, and (2) this Order includes specific compliance schedules for lead and copper to achieve water quality-based effluent limits that are protective of beneficial uses.

***State Implementation Policy (SIP)***

14. The SWRCB adopted the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (also known as the State Implementation Policy or SIP) on March 2, 2000 and the Office of Administrative Law (OAL) approved the SIP on April 28, 2000. The SIP applies to discharges of toxic pollutants in the inland surface waters, enclosed bays and estuaries of California subject to regulation under the State's Porter-Cologne Water Quality Control Act (Division 7 of the Water Code) and the federal Clean Water Act. The SIP establishes implementation provisions for priority pollutant criteria promulgated by the U.S. EPA through the National Toxics Rule (NTR) and California Toxics Rule (CTR), and for priority pollutant objectives established by the Regional Water Quality Control Boards (RWQCBs) in their water quality control

plans (basin plans). The SIP also establishes monitoring requirements for 2,3,7,8-TCDD equivalents, chronic toxicity control provisions, and Pollutant Minimization Programs.

***California Toxics Rule (CTR)***

15. On May 18, 2000, the U.S. EPA published the *Water Quality Standards; Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California* (Federal Register, Volume 65, Number 97, 18 May 2000). These standards are generally referred to as the CTR. The CTR specified water quality criteria (WQC) for numerous pollutants, of which some are applicable to the Discharger's effluent discharges.

***Other Regulatory Bases***

16. WQOs/WQC and effluent limitations in this permit are based on the SIP; the plans, policies and WQOs and criteria of the Basin Plan; CTR (Federal Register Volume 65, 97); *Quality Criteria for Water* (U.S. EPA 440/5-86-001, 1986 and subsequent amendments, "U.S. EPA Gold Book"); applicable Federal Regulations (40 CFR Parts 122 and 131); NTR (57 FR 60848, 22 December 1992 and 40 CFR Part 131.36(b)); NTR Amendment (Federal Register Volume 60, Number 86, 4 May 1995, pages 22229-22237); U.S. EPA December 27, 2002 "National Recommended Water Quality Criteria" compilation (Federal Register Vol. 67, No. 249); and Best Professional Judgment (BPJ) as defined in the Basin Plan. Where numeric effluent limitations have not been established or updated in the Basin Plan, 40 CFR 122.44(d) specifies that water quality-based effluent limitations (WQBELs) may be set based on U.S. EPA criteria and supplemented where necessary by other relevant information to attain and maintain narrative WQC to fully protect designated beneficial uses. Discussion of the specific bases and rationale for effluent limits are given in the associated Fact Sheet for this Permit, which is incorporated as part of this Order.
17. In addition to the documents listed above, other U.S. EPA guidance documents upon which BPJ was developed may include in part:
  - Region 9 Guidance For NPDES Permit Issuance, February 1994;
  - U.S. EPA Technical Support Document for Water Quality-Based Toxics Control (March 1991) (TSD);
  - Policy and Technical Guidance on Interpretation and Implementation of Aquatic Life Metals Criteria, October 1, 1993;
  - Whole Effluent Toxicity (WET) Control Policy, July 1994;
  - National Policy Regarding Whole Effluent Toxicity Enforcement, August 14, 1995;
  - Clarifications Regarding Flexibility in 40 CFR Part 136 Whole Effluent Toxicity (WET) Test Methods, April 10, 1996;
  - Regions 9 & 10 Guidance for Implementing Whole Effluent Toxicity Programs Final, May 31, 1996;
  - Draft Whole Effluent Toxicity (WET) Implementation Strategy, February 19, 1997.

**Basis for Effluent Limitations**

***General Basis***

18. *Federal Water Pollution Control Act*. Effluent limitations and toxic effluent standards are established pursuant to sections 301 through 305, and 307 of the Federal Water Pollution Control Act and amendments thereto are applicable to the discharges herein.

***Conventional Pollutant Effluent Limits***

19. ***Total Suspended Solids.*** There are currently no technology-based effluent limitation guidelines developed for R/O facilities. The total suspended solids (TSS) limitation in Order No. 97-007 are not carried over to this NPDES Order, since the maximum TSS effluent concentration (2.0 mg/L) is significantly less than the Basin Plan limitations for sewage treatment facilities upon which the previous TSS limits were based (30-day average of 30 mg/L, 7-day average of 45 mg/L). Furthermore, it is unlikely that the discharge will contain suspended solids because the raw water is potable city water that has been further filtered (currently with greensand and 5-micron filters) before it is processed in the R/O units. Backwash from the filters discharge to the sanitary sewer. Therefore, the TSS of the effluent is unlikely to cause or contribute to impairment of the receiving water.
20. ***Residual Chlorine:*** An effluent limitation for residual chlorine (instantaneous maximum of 0.0 mg/L) is carried over to this NPDES Order from Order No. 97-007. The limitation is based on the Basin Plan (Table 4-2) and BPJ, which indicates the potential risk of residual chlorine in the influent persisting in the discharge. A residual chlorine level at or above 0.05 mg/L, which is the limit of detection in standard methods defined in Standard Methods for the Examination of Water and Wastewater, is considered a violation.

***Water Quality-Based Effluent Limitations***

21. Toxic substances are regulated by WQBELs derived from water quality objectives listed in the Basin Plan Tables 3-3 and 3-4, the NTR, U.S. EPA recommended criteria, the CTR, the SIP, and/or BPJ. Numeric WQBELs are required for all constituents that have reasonable potential to cause or contribute to an excursion above any State WQO/WQC. Reasonable potential is determined and final WQBELs are developed using the methodology outlined in the SIP. If the Discharger demonstrates that the final limits will be infeasible to meet and provides justification for a compliance schedule, then interim limits are established, with a compliance schedule to achieve the final limits. Further details about the effluent limitations are given in the following findings and the associated Fact Sheet.

***Applicable Water Quality Objectives/Criteria***

22. The WQO and WQC applicable to the receiving waters for this discharge are from the Basin Plan, the CTR, and the NTR.
  - a. The Basin Plan specifies numeric WQOs for 10 priority toxic pollutants, as well as narrative WQOs for toxicity and bioaccumulation in order to protect beneficial uses. The pollutants for which the Basin Plan specifies numeric objectives are arsenic, cadmium, chromium (VI), copper in freshwater, lead, mercury, nickel, silver, zinc, and cyanide (see also c. below). The narrative toxicity objective states in part "[a]ll waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms." The bioaccumulation objective states in part "[c]ontrollable water quality factors shall not cause a detrimental increase in concentrations of toxic substances found in bottom sediments or aquatic life." Effluent limitations and provisions contained in this Order are designed to implement these objectives, based on current available information.
  - b. The CTR specifies numeric aquatic life criteria for 23 priority toxic pollutants and numeric human health criteria for 57 priority toxic pollutants. These criteria apply to inland surface waters and enclosed bays and estuaries such as here, except that where the Basin Plan's Tables 3-3 and 3-4 specify numeric objectives for certain priority toxic pollutants. The Basin Plan's

numeric objectives apply over the CTR (except in the South Bay south of the Dumbarton Bridge).

- c. The NTR established numeric aquatic life criteria for selenium, numeric aquatic life and human health criteria for cyanide, and numeric human health criteria for 34 toxic organic pollutants for waters of San Francisco Bay upstream to and including Suisun Bay and the Sacramento-San Joaquin Delta.

Basin Plan Receiving Water Salinity Policy

23. The Basin Plan states that the salinity characteristics (i.e., freshwater vs. saltwater) of the receiving water shall be considered in determining the applicable WQOs. Freshwater objectives apply to discharges to waters both outside the zone of tidal influence and with salinities lower than 5 parts per thousand (ppt) at least 75 percent of the time. Saltwater objectives shall apply to discharges to waters with salinities greater than 5 ppt at least 75 percent of the time. For discharges to waters with salinities in between the two categories or tidally influenced freshwaters that support estuarine beneficial uses, the objectives shall be the lower of the salt or freshwater objectives, based on ambient hardness, for each substance. For constituents with water quality objectives specified in the Basin Plan, it is appropriate to use the Basin Plan definition for determining if the receiving water is fresh, marine, or estuarine.

CTR Receiving Water Salinity Policy

24. The CTR states that the salinity characteristics (i.e., freshwater vs. saltwater) of the receiving water shall be considered in determining the applicable WQC. Freshwater criteria shall apply to discharges to waters with salinities equal to or less than one ppt at least 95 percent of the time. Saltwater criteria shall apply to discharges to waters with salinities equal to or greater than 10 parts per thousand (ppt) at least 95 percent of the time in a normal water year. For discharges to water with salinities in between these two categories, or tidally influenced freshwaters that support estuarine beneficial uses, the criteria shall be the lower of the salt or freshwater criteria, (the latter calculated based on ambient hardness), for each substance. In applying CTR criteria it is appropriate to use the CTR definition for determining if the receiving water is fresh, marine, or estuarine.

Receiving Water Salinity and Hardness

25. a. Salinity. The salinity of the receiving water is characterized by two measurements taken 50 feet downstream from the point of discharge, where the discharge and ambient background water are well mixed: 0.12 ppt (collected on March 7, 2003, during wet weather conditions) and 2.2 ppt (collected on October 29, 2003, during dry weather conditions). Based on these two measurements, the receiving water is freshwater by the Basin Plan definition, and estuarine by the CTR definition. Therefore, the effluent limitations specified in this Order for discharges to Alameda Creek are based on freshwater Basin Plan WQOs and the lower of freshwater and saltwater CTR and NTR WQC.
- b. Hardness. Some WQOs and WQC are hardness dependent. The Discharger has measured the hardness twice at a point in the receiving water 50 feet downstream of the point of discharge: < 1 mg/L (collected on March 7, 2003, during wet weather conditions) and 110 mg/L (collected on October 29, 2003, during dry weather conditions). Due to the few number of measurements, the lower value was selected because it is more protective of the environment. A default hardness value of 25 mg/L has generally been used in deriving freshwater aquatic life criteria for metals when the ambient (or actual) hardness value is below 25 mg/L, since the data used to develop the hardness equations for deriving aquatic life criteria for metals are usually in the range of 25 to 400 mg/L. In determining the WQOs and WQC for this Order, the Board assumed a hardness of 25 mg/L.

Receiving Water Ambient Background Data Used in Calculating WQBELs

26. There are insufficient ambient background data available for Alameda Creek. By letter dated August 6, 2001, the Board's Executive Officer required the Discharger conduct additional monitoring pursuant to section 13267 of the California Water Code. An interim report was submitted on May 23, 2003. Because the preparation of this Order is in advance of this date, the data collected thus far in Alameda Creek has not been considered in the requirements of this permit.

Total Maximum Daily Loads (TMDLs) and Waste Load Allocations (WLAs)

27. *Constituents Identified in the 303(d) List.* On May 12, 1999, the U.S. EPA approved a revised list of impaired waterbodies prepared by the State. The list (hereinafter referred to as the 303(d) list) was prepared in accordance with Section 303(d) of the federal Clean Water Act to identify specific water bodies where water quality standards are not expected to be met after implementation of technology-based effluent limitations on point sources.
28. Alameda Creek and the lower San Francisco Bay are both listed as impaired waterbodies. Alameda Creek is impaired by diazinon, a household pesticide. The Board does not expect the Discharger to be a source of diazinon to Alameda Creek. Alameda Creek is a tributary to lower San Francisco Bay and may thus contribute to impairments of it. The pollutants impairing lower San Francisco Bay include copper, mercury, nickel, PCBs total, dioxin and furan compounds, chlordane, DDT, dieldrin, diazinon, dioxin TEQ-like PCBs, and exotic species.
29. The TMDLs will establish waste load allocations (WLAs) and load allocations for point sources and non-point sources, respectively, and will result in achieving the water quality standards for the waterbody. The final effluent limitations for this Discharger may be affected by WLAs that are derived from the TMDLs.
30. *Schedule for TMDL and WLAs.* Based on the 303(d) list of pollutants impairing Alameda Creek and the lower San Francisco Bay, the Board plans to adopt TMDLs for these pollutants no later than 2010, with the exception of dioxin and furan compounds. The Board defers development of the TMDL for dioxin and furan compounds to the U.S. EPA. Future review of the 303(d) list for Alameda Creek and lower San Francisco Bay may result in revision of the schedules and/or provide schedules for other pollutants.

***Specific Basis***

Reasonable Potential Analysis

31. As specified in 40 CFR 122.44(d) (1) (i), permits are required to include WQBELs for all pollutants "which the Director determines are or may be discharged at a level which will cause, have the reasonable potential to cause, or contribute to an excursion above any State water quality standard." Using the method prescribed in Section 1.3 of the SIP, Board staff has analyzed the effluent data to determine if the discharge has a reasonable potential to cause or contribute to an excursion above a State water quality standard ("Reasonable Potential Analysis" or "RPA"). For all parameters that have reasonable potential, numeric WQBELs are required. The RPA compares the effluent data with numeric and narrative WQOs in the Basin Plan and numeric WQC from the U.S. EPA Gold Book, the NTR, and the CTR.



32. *RPA Methodology.* The method for determining RPA involves identifying the observed maximum pollutant concentration in the effluent (MEC) and background receiving water (B) for each constituent, based on effluent concentration data. The RPA for all constituents is based on zero dilution, according to section 1.3 of the SIP. There are three triggers in determining reasonable potential.
- The first trigger is activated when the MEC is greater than or equal to the lowest applicable WQO/WQC, which has been adjusted for pH, hardness (assumed in this permit analysis at 25 mg/L), and translator data, if appropriate. An MEC that is greater than or equal to the (adjusted) WQO/WQC means that there is reasonable potential for that constituent to cause or contribute to an excursion above the WQO/WQC and a WQBEL is required. (Is the  $MEC \geq WQO/WQC$ ?)
  - The second trigger is activated if the observed maximum ambient background concentration (B) is greater than the adjusted WQO/WQC and the MEC is less than the adjusted WQO/WQC. If B is greater than the adjusted WQO/WQC, then a WQBEL is required. (Is  $B > WQO/WQC$ ?). As indicated in Finding 29, there are insufficient background data currently available for the receiving water to complete this step in the RPA. When such data are collected as required by the August 6, 2001 letter, Board staff will evaluate the need for WQBELs, as appropriate.
  - The third trigger is activated after a review of other information determines that a WQBEL is required even though both MEC and B are less than the WQO/WQC. A limit is only required under certain circumstances to protect beneficial uses.
33. *Summary of RPA Data and Results.* The RPA was based on effluent monitoring data submitted with the permit renewal application, sampled during 1996 and 2001. Four data points for most metals are available from 1996 sampling. Only one data point, collected in 2001, is available for chromium (III and VI), mercury, cyanide, and dioxins and furans. Two data points for most other priority pollutants in the CTR are available, one sample from 1996 and one from 2001. Based on trigger one of the RPA methodology described above and in the SIP, copper and lead have been found to have reasonable potential to cause or contribute to an excursion above WQOs/WQC. Based on the RPA, numeric WQBELs are required to be included in the permit for these constituents.
34. Board staff recognizes that as a result of the August 6, 2001 letter, additional effluent and background water quality data will be submitted coinciding with the adoption of this Order. Upon evaluation of the additional data, this Order contains a provision that allows the permit to be reopened to establish limits if new data show there is reasonable potential.
35. *RPA Determinations.* The MEC, WQOs, bases for the WQOs, background concentrations used and reasonable potential conclusions from the RPA are listed in the following table for all constituents analyzed. The RPA results for some of the constituents in the CTR were not able to be determined because of the lack of background data, an objective, or effluent data. (Further details on the RPA can be found in the Fact Sheet.)

Constituent	WQO/ WQC ( $\mu\text{g/L}$ )	Basis <sup>1</sup>	MEC outfall 001 ( $\mu\text{g/L}$ )	Maximum Ambient Background Conc. ( $\mu\text{g/L}$ )	Reasonable Potential
Arsenic	190	BP, fw	1.6	Not Available (NA)	No
Cadmium	0.382	BP, fw, H=25	0.05	NA	No
Chromium(VI)	11	BP, fw	< 10	NA	No

Constituent	WQO/ WQC (µg/L)	Basis <sup>1</sup>	MEC outfall 001 (µg/L)	Maximum Ambient Background Conc. (µg/L)	Reasonable Potential
Copper*	3.62	BP, fw, H=25	12	NA	Yes
Lead	0.545	BP, fw, H=25	1.3	NA	Yes
Mercury*	0.025	BP, fw	0.002 <sup>3</sup>	NA	CD <sup>4</sup>
Nickel*	48.8	BP, fw, H=25	3.7	NA	No
Selenium	5.0	NTR	< 0.6	NA	No
Silver	0.374	BP, fw, H=25	0.15	NA	CD <sup>4</sup>
Zinc	32.75	BP, fw, H=25	26	NA	CD <sup>4</sup>
Cyanide	5.2	BP, fw	< 10	NA	No
Dioxin TEQ*	1.4x10 <sup>-8</sup>	CTR	< 0.00043	NA	No
CTR #s 1, 3, 5a, 12, 15-126 except 16	Various or no WQC	CTR	Non-detect, less than WQC, no data	Less than WQC or not available	No or Unknown

\* = Constituents on 303(d) list for the lower San Francisco Bay.

1. RPA based on the following: Hardness (H), 25 in mg/L as CaCO<sub>3</sub>; BP = Basin Plan; CTR = California Toxics Rule; NTR=National Toxics Rule; fw = freshwater; sw = saltwater;
2. Translators are based on the CTR.
3. Based on the single available ultra-clean mercury measurement.
4. CD = Cannot determine due to limited data. See Finding No. 36 below.

36. *Uncertainties of RPA.* Board staff used the below analysis to determine the appropriate monitoring frequency for constituents that have WQO/WQC that are aquatic life driven. For silver and zinc, the RPA results are based on a limited data set of four samples. For mercury, the RPA results are based on a single sample. This limited data set may not accurately reflect the full range of concentrations for these constituents. To determine if a larger data set might trigger reasonable potential for these constituents, Board staff determined the maximum projected concentration of each constituent in accordance with the methodology described in Technical Support Document for Water Quality-Based Toxics Control (Technical Support Document) published by the USEPA Publication No. 505/2-90-001 and compared it with the most stringent water quality objective. For a 99% confidence level with only one data point (mercury) or four data points (silver and zinc), the Technical Support Document (p. 53-54) indicates that the projected MEC is determined by multiplying the actual MEC by 13.2 or 4.7, respectively. The results of this analysis are shown in the table below:

Constituent	Projected MEC (µg/L)	WQO/WQC (µg/L)	Projected MEC > WQO/WQC = More Data Necessary?
Mercury	0.026	0.025	Yes = annual monitoring
Silver	0.705	0.15	Yes = quarterly monitoring
Zinc	122.0	26.	Yes = quarterly monitoring

#### Interim Limits with Compliance Schedules

37. Based on a report dated March 13, 2003, the Discharger has demonstrated infeasibility to meet the WQBELs calculated according to Section 1.4 of the SIP for copper and lead. Therefore, this Order establishes compliance schedules for these pollutants. Since this Order reinterprets the Basin Plan

numeric criteria for copper and lead using the new policies established in the SIP, and this will result in more stringent effluent limitations than in the prior permit, this Order establishes copper and lead compliance schedules until March 31, 2010, ten years (using full months) from the effective date of the SIP (April 28, 2000), per Section 4 of the Basin Plan. The basis for these schedules is further described in Attachment 5 of the Fact Sheet.

### *Specific Pollutants*

38. *Mercury*. The monitoring data for mercury consist of nine data points: four from 1996 and one from 2001. The 1996 data show two detected values of mercury (0.02 µg/L and 0.04 µg/L). These data, however, were collected prior to the required use of ultra-clean sampling techniques and low-level analytical Method 1631B, and are thus likely affected by sample contamination. The analysis in 2001 was performed using the ultra-clean technique and the recommended low-level analytical Method 1631B. The 2001 result was 0.002 µg/L, which is below the most stringent applicable criteria of 0.025 µg/L. As discussed in Finding 36, the Board determines that insufficient mercury data are currently available to determine RP for mercury. The Discharger shall be required to take annual measurements of mercury in the effluent, using the ultra-clean sampling technique. Upon evaluation of the additional data, the Order can be re-opened to establish limits if new data show there is reasonable potential for mercury. Therefore, water quality-based effluent limitations are not included in this Order for mercury. Upon evaluation of the additional data, the Order can also be re-opened to remove the requirement for monitoring if new data demonstrate there is no reasonable potential for mercury.
39. *Dioxin TEQ*.
- (1) The CTR establishes a numeric human health WQC of 0.014 picograms per liter (pg/l) for 2,3,7,8-tetrachlorinated dibenzo-p-dioxin (2,3,7,8-TCDD) based on consumption of aquatic organisms.
  - (2) The preamble of the CTR states that California NPDES permits should use toxicity equivalents (TEQs) where dioxin-like compounds have reasonable potential with respect to narrative criteria. The preamble further states that U.S. EPA intends to use the 1998 World Health Organization Toxicity Equivalence Factor (TEF)<sup>1</sup> scheme in the future and encourages California to use this scheme in State programs. Additionally, the CTR preamble states U.S. EPA's intent to adopt revised water quality criteria guidance subsequent to their health reassessment for dioxin-like compounds.
  - (3) The SIP applies to all toxic pollutants, including dioxins and furans. The SIP requires a limit for 2,3,7,8-TCDD, if a limit is necessary, and requires monitoring for 1 year (once during dry weather and once during wet weather) during a 3 year-period by all minor NPDES dischargers for the other sixteen dioxin and furan compounds.
  - (4) The Basin Plan contains a narrative WQO for bio-accumulative substances:  
"Many pollutants can accumulate on particulates, in sediments, or bio-accumulate in fish and other aquatic organisms. Controllable water quality factors shall not cause a detrimental increase in concentrations of toxic substances found in bottom sediments or aquatic life. Effects on aquatic organisms, wildlife, and human health will be considered."  
This narrative WQO applies to dioxin and furan compounds, based in part on the scientific community's consensus that these compounds associate with particulates, accumulate in sediments, and bio-accumulate in the fatty tissue of fish and other organisms.

<sup>1</sup> The 1998 WHO scheme includes TEFs for dioxin-like PCBs. Since dioxin-like PCBs are already included within "Total PCBs", for which the CTR has established a specific standard, dioxin-like PCBs are not included in this Order's version of the TEF scheme.

- (5) The U.S. EPA's 303(d) listing determined that the narrative objective for bio-accumulative pollutants was not met because of the levels of dioxins and furans in fish tissue.
  - (6) The data collected to date show one sample in which dioxin was not detected, but the level of detection is above the CTR criteria. Based on the nature of the discharge, dioxins and furans are not expected to be present in the effluent. Therefore, based on the Board's BPJ, there is no reasonable potential for dioxin, and no additional monitoring is required for dioxin.
40. *Permit Reopener.* This Order includes a reopener provision to allow numeric effluent limitations to be added for any constituent that exhibits reasonable potential. The Board will make this determination based on monitoring results.

### ***Development of Effluent Limitations***

#### **Dilution and Assimilative Capacity**

41. Discharge is into the engineered ACFCWCD Flood Channel, that during the dry season has only one other significant source of flow approximately one mile upstream. The upstream source, Kobe Precision, Inc. (NPDES Permit No. CA0030112), is permitted to discharge 100,000 gallons per day of a reverse osmosis brine similar to the Discharger's. The actual dilution received by the Discharger's discharge in the channel has not been modeled or measured. Due to limited upstream freshwater flows during the dry weather, the discharge is classified by the Board as a shallow water discharge. Therefore, effluent limitations are calculated assuming no dilution ( $D=0$ ).

#### **Copper**

42. *Copper Water Quality Objectives.* To protect fresh water aquatic life at a hardness of 25 mg/L, the Basin Plan specifies objectives for copper of 3.6 µg/L as a 4-day average and 4.8 µg/L as a 1-hour average.
43. *Copper Effluent Limitations.* Based on the RPA, there is reasonable potential for exceedances of the WQC for copper in the subject discharge. The Discharger has demonstrated and the Board verified that the calculated WQBELs presented in the Fact Sheet, as a point of reference (average monthly effluent limit of 2.4 µg/L and maximum daily effluent limit of 4.8 µg/L) will be infeasible to meet. Board staff considered self-monitoring data from 1996 and 2002 (copper concentrations ranged from 1.6 µg/L to 12 µg/L) to develop an interim limit. The data, however, consisted of 8 measurements (7 detected values), and therefore, it was not possible to perform a meaningful statistical evaluation of current treatment performance. The SIP requires the interim numeric effluent limit for the pollutant be based on either current treatment facility performance, or on the previous Order's limitation, whichever is more stringent. As current sample results for copper are not sufficient to perform a meaningful analysis, and the previous Order does not contain an effluent limitation for copper, this Order does not include an interim limit for copper. The Discharger will collect additional monitoring data under the requirements of this Order. When additional data become available, the Board will develop an interim limit, as appropriate.
44. *Copper Source Control.* This Order requires the Discharger to develop pollution prevention and source control programs to maximize practicable control over copper sources in the plant. It further requires the Discharger to propose any additional measures or investigations that are necessary to identify sources for reduction to comply with the final limits by March 31, 2010.

Lead

45. *Lead Water Quality Objectives.* To protect fresh water aquatic life at a hardness of 25 mg/L, the Basin Plan specifies objectives for lead of 0.55 µg/L as a 4-day average and 13.98 µg/L as a 1-hour average.
46. *Lead Effluent Limitations.* Based on the RPA, there is reasonable potential for exceedances of the WQC for lead in the subject discharge. The Discharger has demonstrated and the Board verified that the calculated WQBELs presented in the Fact Sheet, as a point of reference (average monthly effluent limit of 0.45 µg/L and maximum daily effluent limit of 0.9 µg/L) will be infeasible to meet. Board staff considered self-monitoring data from 1996 (lead concentrations ranged from <0.3 µg/L to 1.3 µg/L) to develop an interim limit. The data, however, only contained 8 measurements (3 detected values), and therefore, it was not possible to perform a meaningful statistical evaluation of current treatment performance. The SIP requires the interim numeric effluent limit for the pollutant be based on either current treatment facility performance, or on the previous Order's limitation, whichever is more stringent. As current sample results for lead are not sufficient to perform a meaningful analysis, and the previous Order does not contain an effluent limitation for lead, this Order does not include an interim limit for lead. The Discharger will collect additional lead monitoring data under the requirements of this Order. When additional data become available, the Board will develop an interim limit, as appropriate.
47. *Lead Source Control.* This Order requires the Discharger to develop pollution prevention and source control programs to maximize practicable control over lead sources in the plant. It further requires the Discharger to propose any additional measures or investigations that are necessary to identify sources for reduction to comply with the final limits by March 31, 2010.

***Whole Effluent Acute Toxicity***

48. This Order includes effluent limits for whole effluent acute toxicity. Compliance evaluation is based on 96-hour static bioassays, using approved U.S. EPA test methods for acute and chronic toxicity bioassays specified in 40CFR 136 (currently 5<sup>th</sup> edition). The previous Order included a limit, with quarterly testing required. The frequency of monitoring is reduced to annual, since the Discharger's monitoring data indicate that from 2000-2002 survival rates ranged from 75-100 percent, which complies with effluent limitations, and indicates a reduced risk for permit violation. Some dischargers have identified several practical and technical issues that need to be resolved before implementing the 5th Edition. The primary unresolved issue is the use of younger, possibly more sensitive fish, which may necessitate a reevaluation of permit limits. SWRCB staff recommended to the Boards that new or renewed permit holders be allowed a time period in which laboratories can become proficient in conducting the new tests. Because this NPDES permit reduces the frequency of bioassays from quarterly to annual, the Discharger should have adequate time before the first bioassay after this NPDES permit is reissued, to implement the new test method.

**Requirement for Monitoring of Pollutants in Effluent and Receiving Water to Implement New Statewide Regulations and Policy**

49. *Insufficient Ambient Background and Effluent Data.* Board staff's review of ambient background monitoring data found there were insufficient data to determine whether there was reasonable potential due to the second SIP trigger ( $B > WQO/WQC$ ) for pollutants listed in the SIP. There was also insufficient effluent data to calculate numeric interim limits for copper and lead. This

insufficiency of data will be addressed by requiring additional accelerated monitoring for copper and lead, so that interim limits can be determined.

50. On August 6, 2001, the Board sent a letter to all the permitted dischargers pursuant to Section 13267 of the California Water Code requiring the submittal of effluent and receiving water data on priority pollutants. This formal request for technical information addresses the insufficient effluent and ambient background data, and the dioxin study. The letter (described above) is referenced throughout the permit as the "August 6, 2001 Letter".
51. Pursuant to the August 6, 2001 Letter from Board Staff, the Discharger is required to submit workplans and sampling results for characterizing the levels of selected constituents in the effluent and ambient receiving water. The Discharger submitted a revised sampling plan on January 29, 2002, which the Executive Officer approved on April 22, 2002.
52. *Monitoring Requirements (Self-Monitoring Program)*. The SMP includes monitoring at the outfall line for conventional, non-conventional pollutants, and acute toxicity. Much of the monitoring has not been changed from the previous Order. This Order requires bi-weekly monitoring for copper and lead, for developing performance based interim limits. As a result of the data review performed during the chlorine attenuation study, this Order requires monthly monitoring for residual chlorine.

#### **CEQA and Public Hearings**

53. *NPDES Permit*. This Order serves as an NPDES Permit, adoption of which is exempt from the provisions of Chapter 3 (commencing with Section 21100) of Division 13 of the Public Resources Code [California Environmental Quality Act (CEQA)] pursuant to Section 13389 of the California Water Code.
54. *Notification*. The Discharger and interested agencies and persons have been notified of the Board's intent to reissue requirements for the existing discharges and have been provided an opportunity to submit their written views and recommendations. Board staff prepared a Fact Sheet and Response to Comments, which are hereby incorporated by reference as part of this Order.
55. *Public Hearing*. The Board, in a public meeting, heard and considered all comments pertaining to the discharge.

**IT IS HEREBY ORDERED**, pursuant to the provisions of Division 7 of the California Water Code, regulations, and plans and policies adopted thereunder, and to the provisions of the Clean Water Act and regulations and guidelines adopted thereunder, that the Discharger shall comply with the following:

#### **A. DISCHARGE PROHIBITIONS**

1. Discharge of treated wastewater at a location or in a manner different from that described in this Order is prohibited.

## B. EFFLUENT LIMITATIONS

1. Effluent discharged into ACFCWCD Flood Channel (with eventual discharge to the lower San Francisco Bay) shall not exceed the following:

<u>Constituent</u>	<u>Units</u>	<u>Monthly Average</u>	<u>Weekly Average</u>	<u>Instantaneous Maximum</u>
Residual Chlorine <sup>1</sup>	mg/L			0.0

<sup>1</sup> The Discharger may elect to use a continuous on-line monitoring system(s) for measuring flows, residual chlorine concentration, and sodium metabisulfate concentration (which could be interpolated) to prove that chlorine residual exceedances are false positives. If convincing evidence is provided, the Executive Officer may conclude that chlorine residual exceedances are false positives and not violations of this permit limit.

2. The pH of the discharge shall not exceed 8.5 nor be less than 6.5.
3. The average monthly discharge shall not exceed a flow limitation of 110,000 gallons per day.
4. Whole Effluent Acute Toxicity: Representative samples of the effluent shall meet the following limits for acute toxicity. Compliance with these limits shall be achieved in accordance with Provision D.5 of this Order:
  - a. The survival of bioassay test organisms in 96-hour bioassays of undiluted effluent shall be:
    - (1) A three (3)-sample median value of not less than 90 percent survival; and
    - (2) A single (1) value of not less than 70 percent survival.
  - b. These acute toxicity limits are further defined as follows:
    - (1) **3-sample median limit:** Any bioassay test showing survival of 90 percent or greater is not a violation of this limit. A bioassay test showing survival of less than 90 percent represents a violation of this effluent limit, if one of the past two or fewer bioassay tests also show less than 90 percent survival.
    - (2) **1-sample limit:** A bioassay test showing survival of less than 70 percent represents a violation of this effluent limit.

## C. RECEIVING WATER LIMITATIONS

1. The discharges shall not cause the following conditions to exist in waters of the State at any place:
  - a. Floating, suspended, or deposited macroscopic particulate matter or foam;
  - b. Bottom deposits or aquatic growths to the extent that such deposits or growths cause nuisance or adversely affect beneficial uses;
  - c. Alteration of temperature, turbidity, or apparent color beyond present natural background levels;
  - d. Visible, floating, suspended, or deposited oil or other products of petroleum origin; and

- e. Toxic or other deleterious substances to be present in concentrations or quantities which will cause deleterious effects on wildlife, waterfowl, or other aquatic biota, or which render any of these unfit for human consumption, either at levels created in the receiving waters or as a result of biological concentration.
2. The discharges shall not cause nuisance, or adversely affect the beneficial uses of the receiving water.
3. The discharges shall not cause the following limits to be violated in waters of the State at any one place within one foot of the water surface:

- a. Dissolved Oxygen: 7.0 mg/L, minimum

The median dissolved oxygen concentration for any three consecutive months shall not be less than 80% of the dissolved oxygen content at saturation. When natural factors cause concentrations less than that specified above, then the discharges shall not cause further reduction in ambient dissolved oxygen concentrations.

- b. Dissolved Sulfide: 0.1 mg/L, maximum

- c. pH: The pH shall not be depressed below 6.5 nor raised above 8.5, nor caused to vary from normal ambient pH by more than 0.5 pH units.

- d. Un-ionized Ammonia: 0.025 mg/L as N, annual median; and  
0.16 mg/L as N, maximum.

- e. Nutrients: Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses.

4. The discharges shall not cause a violation of any particular water quality standard for receiving waters adopted by the Board or the State Board as required by the Clean Water Act and regulations adopted thereunder. If more stringent applicable water quality standards are promulgated or approved pursuant to Section 303 of the Clean Water Act, or amendments thereto, the Board will revise and modify this Order in accordance with such more stringent standards.

#### **D. PROVISIONS**

1. **Permit Compliance and Rescission of Previous Waste Discharge Requirements**

The Discharger shall comply with all sections of this Order beginning on August 1, 2003. Requirements prescribed by this Order supersede the requirements prescribed by Order No. 97-007.

2. **Receiving Water Monitoring**

The Discharger shall collect or participate in collecting background ambient receiving water monitoring (upstream of point of discharge) for priority pollutants that is required to perform RPAs and calculate effluent limitations. To fulfill this requirement, the Discharger shall submit data sufficient to characterize the concentration of each toxic pollutant listed in the CTR in the ambient receiving water that will provide dilution for the discharge. The data on the conventional water



quality parameters (pH, salinity, and hardness) shall also be sufficient to characterize these parameters in the receiving water at a point after the discharge has mixed with the receiving waters.

The Discharger submitted a sampling plan dated January 29, 2002, for the monitoring program. The Executive Officer conditionally approved this plan on April 22, 2002.

Final Report: The Discharger shall submit a final report that presents all the data to the Board 180 days prior to permit expiration. This final report shall be submitted with the application for permit reissuance.

### **Toxicity Requirements**

#### **3. Whole Effluent Acute Toxicity**

Compliance with acute toxicity requirements of this Order shall be achieved in accordance with the following:

- a. Compliance with the acute toxicity effluent limits of this Order shall be evaluated by measuring survival of test organisms exposed to 96-hour flow through bioassays, or static renewal bioassays.
- b. Test organisms shall be rainbow trout or fathead minnow unless specified otherwise in writing by the Executive Officer.
- c. All bioassays shall be performed according to the most up-to-date protocols in 40CFR 136 (currently 5<sup>th</sup> edition), with exceptions if granted to the Discharger by the Executive Officer and the Environmental Laboratory Accreditation Program (ELAP).

### **Compliance Schedule Requirements**

#### **4. Copper Compliance Schedule**

The Discharger shall comply with the following tasks and deadlines:

Task	Deadline
a. Discharger shall submit a report acceptable to the Executive Officer that identifies sources of copper at the plant based on additional source monitoring, and that proposes a work plan for how those sources may be reduced and controlled in order to achieve compliance with the final limits specified in this Order. Discharger may evaluate the feasibility of effluent reclamation and reuse projects, and site specific translators. Based on this information, the Board may reopen this Permit to establish additional interim requirements.	December 1, 2003
b. Submit annual report describing status of the work accomplished towards compliance with the WQBELs for copper.	June 1 of each year
c. Full compliance with final WQBEL Limitations for copper	March 31, 2010

**5. Lead Compliance Schedule**

The Discharger shall comply with the following tasks and deadlines:

Task	Deadline
a. Discharger shall submit a report acceptable to the Executive Officer that identifies sources of lead at the plant based on additional source monitoring, and that proposes a work plan for how those sources may be reduced and controlled in order to achieve compliance with the final limits specified in this Order. Discharger may evaluate the feasibility of effluent reclamation and reuse projects, and site specific translators. Based on this information, the Board may reopen this Permit to establish additional interim requirements.	December 1, 2003
b. Submit annual report describing status of the work accomplished towards compliance with the WQBELs for copper.	June 1 of each year
c. Full compliance with final WQBEL Limitations for lead	March 31, 2010

**6. Operations and Maintenance Manual**

The Discharger shall review, and update as necessary, its Operations and Maintenance Manual annually or within 90 days of completion of any significant facility or process changes. The Discharger shall submit to the Board, by April 30 of each year, a letter describing the results of the review process including an estimated time schedule for completion of any revisions determined necessary, and a description or copy of any completed revisions.

**7. Self-Monitoring Program**

The Discharger shall comply with the Self-Monitoring Program (SMP) for this Order as adopted by the Board. The SMP may be amended by the Executive Officer pursuant to U.S. EPA regulations 40 CFR 122.62, 122.63, and 124.5.

**8. Standard Provisions and Reporting Requirements**

The Discharger shall comply with all applicable items of the Standard Provisions and Reporting Requirements for NPDES Surface Water Discharge Permits, August 1993 (attached), or any amendments thereafter. Where provisions or reporting requirements specified in this Order are different from equivalent or related provisions or reporting requirements given in 'Standard Provisions', the specifications of this Order shall apply.

**9. Change in Control or Ownership**

- a. In the event of any change in control or ownership of land or waste discharge facilities presently owned or controlled by the Discharger, the Discharger shall notify the succeeding owner or operator of the existence of this Order by letter, a copy of which shall be immediately forwarded to the Board.
- b. To assume responsibility of and operations under this Order, the succeeding owner or operator must apply in writing to the Executive Officer requesting transfer of the Order (see Standard Provisions & Reporting Requirements, August 1993, Section E.4.). Failure to submit the request shall be considered a discharge without requirements, a violation of the California Water Code.

**10. Permit Reopener**

The Board may modify or reopen this Order and Permit prior to its expiration date in any of the following circumstances:

- (1) If present or future investigations demonstrate that the discharge(s) governed by this Order and Permit will or have a reasonable potential to cause or contribute to adverse impacts on water quality and/or beneficial uses of the receiving waters. This may include submission of water quality data collected as required by the August 6, 2001 letter.
- (2) New or revised WQOs come into effect for the San Francisco Bay estuary and contiguous water bodies (whether statewide, regional, or site-specific). In such cases, effluent limitations in this permit will be modified as necessary to reflect updated WQOs. Adoption of effluent limitations contained in this Order and Permit are not intended to restrict in any way future modifications based on legally adopted WQOs or as otherwise permitted under Federal regulations governing NPDES permit modifications;
- (3) If translator or other water quality studies provide a basis for determining that a permit condition(s) should be modified. The Discharger may request permit modification on this basis. The Discharger shall include in any such request an antidegradation and antibacksliding analysis.

**11. NPDES Permit**

This Order shall serve as a National Pollutant Discharge Elimination System (NPDES) permit pursuant to Section 402 of the Clean Water Act or amendments thereto, and shall become effective on August 1, 2003, provided the U.S. EPA Regional Administrator has no objection. If the Regional Administrator objects to its issuance, the permit shall not become effective until such objection is withdrawn.

**12. Order Expiration and Reapplication**

- a. This Order expires on July 31, 2008.
- b. In accordance with Title 23, Chapter 3, Subchapter 9 of the California Administrative Code, the Discharger must file a report of waste discharge no later than 180 days before the expiration date of this Order as application for reissue of this permit and waste discharge requirements. The application shall be accompanied by a summary of all available water quality data including conventional pollutant data from no less than the most recent 3 years, and of toxic pollutant data no less than from the most recent 5 years, in the discharge and receiving water (see Provision D.2).

I, Loretta K. Barsamian, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on June 18, 2003.

  
LORETTA K. BARSAMIAN  
Executive Officer

**Attachments:**

- A. Discharge Facility Location Map
- B. Discharge Facility Treatment Process Diagram
- C. Self-Monitoring Program, Part B
- D. Fact Sheet
- E. Self-Monitoring Program, Part A (August 1993) \*
- F. Standard Provisions and Reporting Requirements (August 1993) \*
- G. Board Resolution No. 74-10 \*

*\*Note: Self-Monitoring Program Part A (August 1993), Standard Provisions and Reporting*

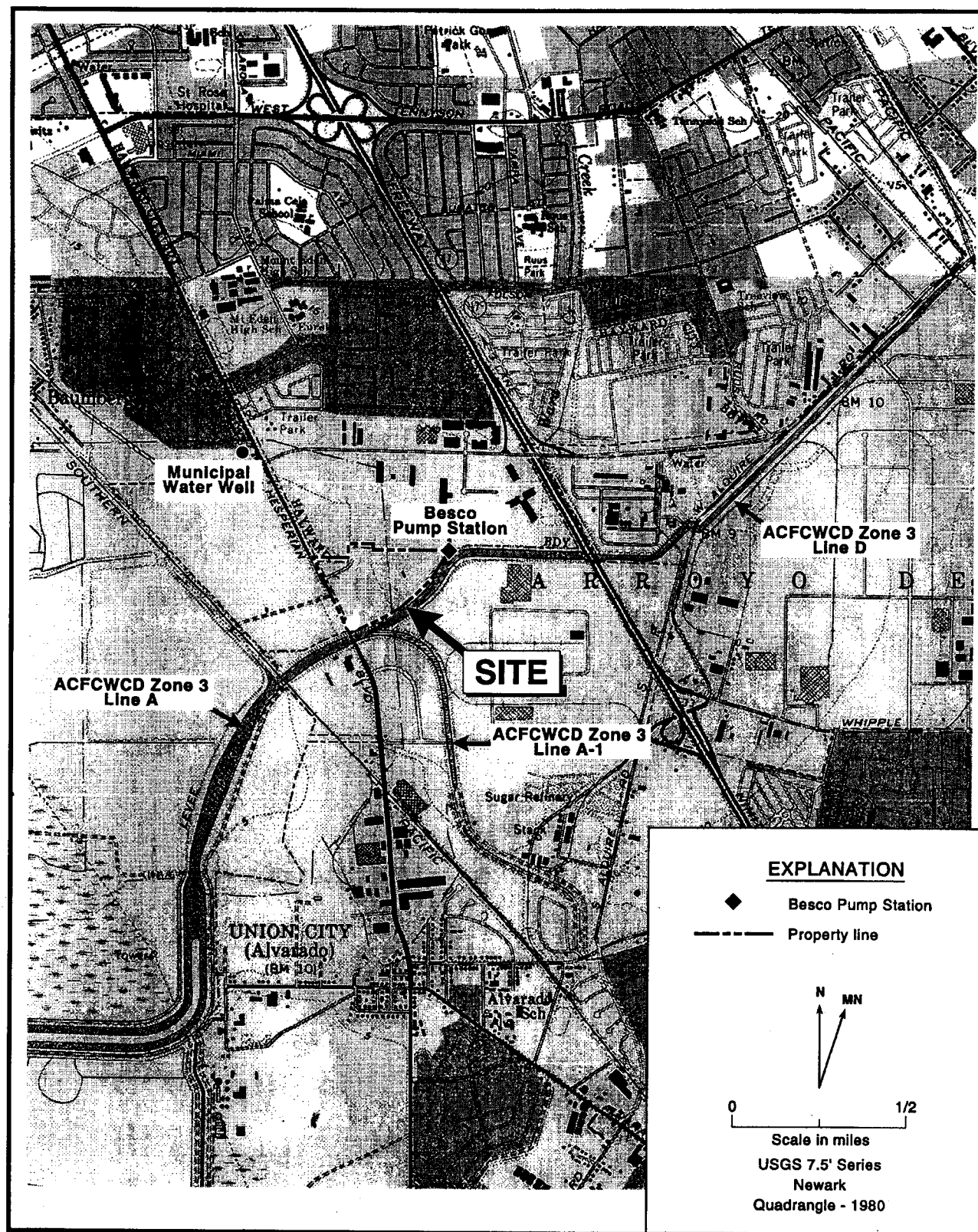
Bottling Group, LLC - NPDES Permit No. CA0030058

*Requirements (August 1993), and Board Resolution No. 74-10 are not attached but are available for review or download on the Board's website at [www.swrcb.ca.gov/rwqcb2](http://www.swrcb.ca.gov/rwqcb2).*

## **ATTACHMENT A**

### **Discharge Facility Location Map**

# Attachment A. Discharge Facility Location Map



## **ATTACHMENT B**

### **Discharge Facility Treatment Process Diagram**

## 09/24/01





**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
SAN FRANCISCO BAY REGION**

**SELF-MONITORING PROGRAM**

**FOR**

**BOTTLING GROUP, LLC  
HAYWARD, ALAMEDA COUNTY**

**NPDES PERMIT NO. CA0030058**

**ORDER NO. R2-2003-0051**

**Consists of:**

**Part A (not attached)  
Adopted August 1993**

**and**

**Part B (Attached)  
Adopted: June 18, 2003  
Effective: August 1, 2003**

*Note: Part A (dated August 1993, Standard Provisions and Reporting Requirements for NPDES Surface Water Discharger Permits (dated August 1993), and Resolution No. 74-10 referenced in this Self Monitoring Program are not attached but are available for review or download on the Board's website at [www.swrcb.ca.gov/rwqcb2](http://www.swrcb.ca.gov/rwqcb2).*

## SELF-MONITORING PROGRAM – Part B

### I. Description of Sampling and Observation Stations

<u>Station</u>	<u>Description</u>
A. INFLUENT	
I-001	Located at any point in the pipe, which delivers raw water to the Discharger's reverse osmosis plant, prior to any point of use. If more than one pipe is involved in supplying raw water, the influent sample shall consist of a flow-proportioned composite from each of the sources.
B. EFFLUENT	
E-001	At a point in the outfall between the point of discharge and the point at which all wastes tributary to the discharge are present, prior to mixing of this discharge with other wastewater discharges not permitted by this Order.
E-001a	Located at any point in the 12,000 gallon storm-water interceptor or the downstream adjacent outlet box.

### II. Schedule of Sampling, Measurements, and Analysis

- A. The schedule of sampling, measurements, and analysis shall be that given in Table I (attached).

### III. Reporting Requirements

- A. General Reporting Requirements are described in Section E of the Board's *Standard Provisions and Reporting Requirements for NPDES Surface Water Discharge Permits*, dated August 1993.
- B. Any overflow, bypass, or any significant noncompliance incident that may endanger health or the environment shall be reported within 24 hours in accordance with Sections F.1 and F.2 of SMP Part A. The date, time, duration, location, estimated volume of wastewater discharged, and corrective actions taken for these events shall be reported in monthly self-monitoring reports.

### IV. Modifications to Part A

- A. Exemptions from Part A: Self-Monitoring Report  
This monitoring program does include the following sections of Part A: C.2d; C.2.f; C.4; C.5; D.4, and E.3.
- B. Modification to section F.1 of Part A: Self-Monitoring Report
1. The second sentence of section F.1 shall be modified as follows: "Spills shall be reported immediately after the occurrence to the Board at 510-622-2300 on weekdays during 8 a.m. to 5

p.m., and to the Office of Emergency Services at 1-800-852-7550 on weekends or when the spill occurred outside these hours.”

2. Section F.1.b is revised to read: “Best estimate of volume involved...”
3. Section F.1.d is revised to read: “Cause of spill or overflow...”
4. Section F.1.i is revised to read: “Agencies or persons notified....”

C. Modification to section F.4 of Part A: Self-Monitoring Report:

*Quarterly self-monitoring report:* The purpose of the report is to document treatment performance, effluent quality and compliance with waste discharge requirements prescribed by this Order, as demonstrated by the monitoring program data and the Discharger’s operation practices. The self-monitoring report (SMR) shall be submitted in accordance with the following:

1. The report shall be submitted to the Board on a quarterly basis, by the 30<sup>th</sup> day following the end of each quarter, on January 30, April 30, July 30, and October 30.
2. *Letter of Transmittal:* Each report shall be submitted with a letter of transmittal. This letter shall include the following:
  - a. Identification of all violations of effluent limits or other discharge requirements found during the monitoring period;
  - b. Details of the violations: parameters, magnitude, test results, frequency, and dates;
  - c. The cause of the violations;
  - d. Discussion of corrective actions taken or planned to resolve violations and prevent recurrence, and dates or time schedule of action implementation. If previous reports have been submitted that address corrective actions, reference to such reports is satisfactory;
  - e. Signature: The letter of transmittal shall be signed by the Discharger's principal executive officer or ranking elected official, or duly authorized representative, and shall include the following certification statement:

“I certify under penalty of law that this document and all attachments have been prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. The information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.”
3. *Compliance Evaluation Summary:* Each report shall include a compliance evaluation summary. This summary shall include, for each parameter for which effluent limits are specified in the Permit, the number of samples taken during the monitoring period, and the number of samples in violation of applicable effluent limits.
4. *Results of Analyses and Observations.*
  - a. Tabulations of all required analyses and observations, including parameter, sample date and time, sample station, and test result;
  - b. If any parameter specified in Table 1 of Part B is monitored more frequently than required by this permit and SMP, the results of this additional monitoring shall be included in the

monitoring report, and the data shall be included in data calculations and compliance evaluations for the monitoring period;

- c. Calculations for all effluent limits that require averaging of measurements shall utilize an arithmetic mean, unless specified otherwise in this permit or SMP.

5. *Effluent Data Summary – U.S. EPA NPDES Discharge Monitoring Reports:* Summary tabulations of monitoring data including maximum, minimum and average values for subject monitoring period shall be reported in accordance with the format given by the U.S. EPA NPDES Discharge Report(s) (DMRs; U.S. EPA Form 3320-1 or successor). Copies of these DMRs shall be provided to U.S. EPA as required by U.S. EPA.
6. *Data Reporting for Results Not Yet Available:* The Discharger shall make all reasonable efforts to obtain analytical data for required parameter sampling in timely manner. The Board recognizes that certain analyses require additional time in order to complete analytical processes and result reporting. For cases where required monitoring parameters require additional time to complete analytical processes and reporting, and results are not available in time to be included in the SMR for the subject monitoring period, such cases shall be described in the SMR. Data for these parameters, and relevant discussions of any observed violations, shall be included in the next following SMR after the data become available.
7. *Report Submittal:* The Discharger shall submit SMRs to:  
Executive Officer  
San Francisco Bay Regional Water Quality Control Board  
1515 Clay Street, Suite 1400  
Oakland, CA 94612  
Attn: NPDES Division

D. Modification to section F.5 of Part A: Annual Report:

An Annual Report shall be submitted for each calendar year. The report shall be submitted to the Board by March 1 of the following year. This report shall include the following:

1. Both tabular and graphical summaries of monitoring data collected during the calendar year that characterizes treatment plant performance and compliance with waste discharge requirements.
2. A comprehensive discussion of treatment plant performance and compliance with waste discharge requirements. This discussion should include any corrective actions taken or planned such as changes to facility equipment or operation practices which may be needed to achieve compliance, and any other actions taken or planned that are intended to improve performance and reliability of the Discharger's wastewater collection, treatment or disposal practices.

E. Additions to Part A of Self-Modification Program:

1. Reporting Data in Electronic Format:

The Discharger has the option to submit all monitoring results in electronic reporting format approved by the Executive Officer. If the Discharger chooses to submit the SMRs electronically, the following shall apply:

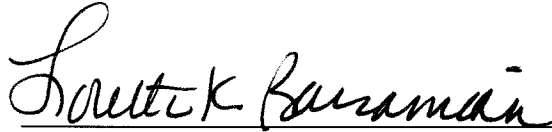
- a. *Reporting Method:* The Discharger shall submit SMRs electronically via the process approved by the Executive Officer in a letter dated December 17, 1999, Official Implementation of Electronic Reporting System (ERS).
- b. *Modification of reporting requirements:* Reporting requirements F.4 in the attached *Self-Monitoring program, Part A*, dated August 1993, shall be modified as follows. In the future, the Board intends to modify Part A to reflect these changes.
- c. *Quarterly Report Requirements:* For each quarter, a self-monitoring report (SMR) shall be submitted to the Board in accordance with the following:
  - i. The report shall be submitted to the Board no later than 30 days from the last day of the reporting quarter, on January 30, April 30, July 30, and October 30.
  - ii. *Letter of Transmittal:* Each report shall be submitted with a letter of transmittal. This letter shall include the following:
    - (i) Identification of all violations of effluent limits or other discharge requirements found during the monitoring period;
    - (ii) Details of the violations: parameters, magnitude, test results, frequency, and dates;
    - (iii) The cause of the violations;
    - (iv) Discussion of corrective actions taken or planned to resolve violations and prevent recurrence, and dates or time schedule of action implementation. If previous reports have been submitted that address corrective actions, reference to such reports is satisfactory.
    - (v) *Signature:* The letter of transmittal shall be signed by the Discharger's principal executive officer or ranking elected official, or duly authorized representative, and shall include the following certification statement:

"I certify under penalty of law that this document and all attachments have been prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. The information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."
  - (vi) *Compliance Evaluation Summary:* Each report shall include a compliance evaluation summary. This summary shall include the number of samples in violation of applicable effluent limits.
  - (vii) *Results of Analyses and Observations.*
  - (viii) *Tabulations of all required analyses and observations, including parameter, sample date, sample station, and test result.*
  - (ix) If any parameter is monitored more frequently than required by this permit and SMP, the results of this additional monitoring shall be included in the monitoring report, and the data shall be included in data calculations and compliance evaluations for the monitoring period.
  - (x) Calculations for all effluent limits that require averaging of measurements shall utilize an arithmetic mean, unless specified otherwise in this permit or SMP.
- d. *Data Reporting for Results Not Yet Available:* The Discharger shall make all reasonable efforts to obtain analytical data for required parameter sampling in a timely manner. The Board recognizes that certain analyses require additional time in order to complete analytical processes and result reporting. For cases where required monitoring parameters require additional time to complete analytical processes and reporting, and results are not available in time to be included in the SMR for the subjected monitoring period, such cases shall be described in the SMR. Data for these parameters, and relevant discussions of any observed violations, shall be included in the next following SMR after the data become available.

**V. Self-Monitoring Program Certification**

I, Loretta K. Barsamian, Executive Officer, hereby certify that the foregoing Self-Monitoring Program:

1. Has been developed in accordance with the procedure set forth in this Board's Resolution No. 73-16 in order to obtain data and document compliance with waste discharge requirements established in Board Order No. XXXX-.
2. May be reviewed at any time subsequent to the effective date upon written notice from the Executive Officer or request from the Discharger, and revisions will be ordered by the Executive Officer.
3. Is effective as of August 1, 2003.



LORETTA K. BARSAMIAN  
Executive Officer

Attachment: Table I – Schedule for Sampling, Measurements, and Analyses

**TABLE 1**  
**SCHEDULE FOR SAMPLING, MEASUREMENTS, AND ANALYSES [1]**

Sampling Station	I-001		E-001	
Type of Sample Parameter (units) [notes]	G	Co	G	Co
Flow rate (mgd) [1]	D			D
Chlorine residual (mg/L) [2]			M	
Total Dissolved Solids (mg/L)			M	
Acute Toxicity (% Surv) [3]			Q	
pH (s.u.)			W	
Temperature (°C)			W	
Copper (µg/L) [4]			2/M	
Lead (µg/L) [4]			2/M	
Mercury (µg/L) [5]			A	
Silver (µg/L) [4]			Q	
Zinc (µg/L) [4]			Q	
Standard Observations			W	
Sodium Metabisulfite Observations [6]	D			

**LEGEND FOR TABLE 1**Type of Stations:

I = treatment influent

E = treatment facility effluent

Frequency of Sampling:

D = once each day

W = once each week

2/M = twice each month

M = once each month

Q = once each calendar quarter (at least two months apart)

A = once each calendar year, timing of sampling should vary from year to year

Types of Samples:

Co = continuous sampling

G = grab sample

**FOOTNOTES FOR TABLE 1**

- [1] **Flow Monitoring:** Flows shall be measured continuously and recorded daily, except on weekends and holidays when Discharger's facility has limited staff to take measurements. Over these periods, an average flow may be reported by dividing the total flow volume by the period, with a note indicating the values are averages taken over multiple days. The following information shall also be reported quarterly:

Average Daily Flow (mgd)

Maximum Daily Flow (mgd)

Minimum Daily Flow (mgd)

- [2] **Chlorine Residual:**

The Discharger shall use an analytical method with a method detection limit no greater than 0.05 mg/L. The residual chlorine level is considered in violation if it is at or above 0.05 mg/L.

If residual chlorine measurements at E-001 are found to be above the permit effluent limitation, an alternative sample may be immediately collected at E-001a and measured to account for possible attenuation of residual chlorine in the storm drain system. The measurement at E-001a may be reported for compliance purposes, if the Board is notified within 24 hours, and the event and E-001 measurement are described in the transmittal letter of the self-monitoring report.

Bottling Group, LLC – NPDES Self-Monitoring Program, Part B

- [3] Fish Toxicity shall be determined using 96-hour, static-renewal bioassays using grab samples representative of the discharged effluent. The test specie shall be either fathead minnow or rainbow trout. Effluent used for fish bioassays must be undiluted, dechlorinated effluent.

The bioassay water shall be tested for pH, dissolved oxygen, and temperature at the start of the bioassay, and then daily for the duration of the bioassay test (i.e., at 0, 24, 48, 72, and 96 hours from the start of the bioassay test).

- [4] Copper, lead, silver, and zinc samples may be grabs or 24-hour composites. Composite samples may be from a continuous compositing sampler, or may be made up of discrete grabs collected through out the day.
- [5] Ultra-clean sampling techniques, to the maximum extent practicable, and low-level analytical Method 1631B shall be used.
- [6] The Discharger shall check on a daily basis the sodium metabisulfite pumps and tanks, and notify the Board within 24 hours via telephone if they are not operating as intended while discharging. This requirement will provide some assurance to the Board that a monthly frequency of monitoring of residual chlorine is adequate for compliance determination.



## **ATTACHMENT C**

### **Self-Monitoring Program, Part B**

## **ATTACHMENT D**

### **Fact Sheet**

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
SAN FRANCISCO BAY REGION  
1515 CLAY STREET, SUITE 1400  
OAKLAND, CA 94612  
(510) 622 - 2300 Fax: (510) 622 - 2460

## **FACT SHEET**

for

NPDES PERMIT and WASTE DISCHARGE REQUIREMENTS for  
**BOTTLING GROUP, LLC**  
HAYWARD, ALAMEDA COUNTY  
NPDES Permit No. CA0030058  
ORDER NO. R2-2003-0051

### **PUBLIC NOTICE:**

#### **Written Comments**

- Interested persons are invited to submit written comments concerning this draft permit.
- Comments must be submitted to the Regional Board no later than 5:00 p.m. on **May 19, 2003**.
- Send comments to the Attention of Daniel Leva.

#### **Public Hearing**

- The draft permit will be considered for adoption by the Board at a public hearing during the Board's regular monthly meeting at: Elihu Harris State Office Building, 1515 Clay Street, Oakland, CA; 1<sup>st</sup> floor Auditorium.
- This meeting will be held on: **June 18, 2003**, starting at 9:00 am.

#### **Additional Information**

- For additional information about this matter, interested persons should contact Regional Board staff member: Mr. Daniel Leva, Phone: (510) 622-2415; email: dkl@rb2.swrcb.ca.gov

This Fact Sheet contains information regarding an application for waste discharge requirements and National Pollutant Discharge Elimination System (NPDES) permit for Bottling Group, LLC (Discharger) for treated wastewater discharges. The Fact Sheet describes the factual, legal, and methodological basis for the proposed permit and provides supporting documentation to explain the rationale and assumptions used in deriving the limits.

### **I. INTRODUCTION**

The Discharger applied to the Board for reissuance of waste discharge requirements and a permit to discharge municipal wastewater to waters of the State and the United States under the NPDES. The application and Report of Waste Discharge is dated July 12, 2001.

The Discharger operates a bottled water and soft drink manufacturing, bottling, and distribution facility. As part of the manufacturing process, the facility requires ultra clean water for its products. To obtain the highest quality of water, two reverse osmosis (R/O) units are utilized to treat influent raw water. Currently, the Discharger discharges on average 110,000 gallons per day (mgd) of treated

reverse osmosis concentrate. The U.S. EPA and the Board have classified this Discharger as a minor discharger.

This NPDES permit protects all beneficial uses of the receiving water (ACFCWCD Flood Channel) and of downstream waterbodies, such as the Old Alameda Creek. Protection of the beneficial uses of specifically named waterbodies and its tributaries is based on Chapter 2 of the Basin Plan. The beneficial uses designated in the Basin Plan for Alameda Creek and its tributaries include:

- a. Agricultural Supply
- b. Cold Freshwater Habitat
- c. Groundwater Recharge
- d. Fish Migration
- e. Water Contact Recreation
- f. Non-Contact Water Recreation
- g. Fish Spawning
- h. Warm Freshwater Habitat
- i. Wildlife Habitat

Based on two salinity measurements taken 50 feet downstream of the discharge point (0.12 ppt and 2.2 ppt), the receiving water is freshwater by the Basin Plan definition, and estuarine by the CTR definition. Therefore, the effluent limitations specified in this Order for discharges to ACFCWCD Flood Channel are based on freshwater Basin Plan WQOs and the lower of freshwater and saltwater CTR and NTR WQC.

## II. DESCRIPTION OF EFFLUENT

The table below presents the quality of the discharge, as indicated in the Discharger's self-monitoring reports submitted for the period from January 2000 through September 2002. Average values represent the average of actual detected values only.

**Table A. Summary of Discharge Data**

Parameter	Average	Daily Maximum
pH, standard units	--	6.4 – 8.5 <sup>1</sup>
Temperature, degrees C	15.7	20.4
TSS, mg/L	1.5	2
TDS, mg/L	354	5430
Residual chlorine, mg/L	0.09	0.168
Antimony, µg/L	0.91	2.9
Arsenic, µg/L	1.07	1.6
Cadmium, µg/L	0.04	0.05
Chromium (III), µg/L	2.32	6.4
Copper, µg/L	5.1	12
Lead, µg/L	0.99	1.3
Mercury, µg/L	0.002 <sup>2</sup>	0.002 <sup>2</sup>
Nickel, µg/L	2.53	3.7
Silver, µg/L	0.15	0.15 <sup>3</sup>
Thallium, µg/L	0.01	0.01 <sup>3</sup>
Zinc, µg/L	20	26

<u>Parameter</u>	<u>Average</u>	<u>Daily Maximum</u>
Chloroform, µg/L	93	110
Dichlorobromomethane, µg/L	4.75	7.2
Methyl bromide, µg/L	8.4	8.4 <sup>4</sup>

<sup>1</sup> This represents the range of pH values. There was one exceedance of the effluent limitation.

<sup>2</sup> Based on the single available ultra-clean mercury measurement.

<sup>3</sup> All detected values were the same value.

<sup>4</sup> There was only one detected value for methyl bromide.

The table below presents the quality of the discharge, as indicated in the Discharger's permit renewal application, dated July 12, 2001.

<u>Parameter</u>	<u>Daily Maximum</u>
pH, standard units	7.55
BOD <sub>5</sub> , mg/L	< 1.0
COD, mg/L	21
TOC, mg/L	12
TSS, mg/L	230
Ammonia, as N, mg/L	0.27
Temperature, degrees C	15/18.1 <sup>1</sup>

<sup>1</sup> Represents winter and summer temperatures, respectively.

### III. GENERAL RATIONALE

The following documents are the bases for the requirements contained in the proposed Order, and are referred to under the specific rationale section of this Fact Sheet.

- Federal Water Pollution Control Act, as amended (hereinafter the **CWA**).
- Federal Code of Regulations, Title 40 - Protection of Environment, Chapter 1, Environmental Protection Agency, Subchapter D, Water Programs, Parts 122-129 (hereinafter referred to as 40 CFR specific part number).
- Water Quality Control Plan, San Francisco Bay Basin, adopted by the Board on June 21, 1995 (hereinafter the **Basin Plan**). The California State Water Resources Control Board (hereinafter the **State Board**) approved the Basin Plan on July 20, 1995 and by California State Office of Administrative Law approved it on November 13, 1995. The Basin Plan defines beneficial uses and contains WQOs for waters of the State, including Alameda Creek and the lower San Francisco Bay.
- California Toxics Rules, Federal Register, Vol. 65, No. 97, May 18, 2000 (hereinafter the **CTR**).
- National Toxics Rules 57 FR 60848, December 22, 1992, as amended (hereinafter the **NTR**).
- State Board's Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California, May 1, 2000 (hereinafter the **State Implementation Policy**, or **SIP**).

- Ambient Water Quality Criteria for Bacteria – 1986, U.S. EPA 440/5-84-002, January 1986.
- U.S. EPA Technical Support Document for Water Quality-Based Toxics Control, EPA/505/2-90-001, March 1991 (hereinafter TSD).

#### IV. SPECIFIC RATIONALE

Several specific factors affecting the development of limitations and requirements in the proposed Order are discussed as follows:

##### 1. Recent Plant Performance

Section 402(o) of CWA and 40 CFR § 122.44(l) require that water quality-based effluent limits (WQBELs) in re-issued permits be at least as stringent as in the previous permit. The SIP specifies that interim effluent limitations, if required, must be based on current treatment facility performance or on existing permit limitations whichever is more stringent. In determining what constitutes “recent plant performance”, best professional judgment (BPJ) was used. Effluent monitoring data collected from 2000 to 2002 are considered representative of recent plant performance.

##### 2. Impaired Water Bodies in 303(d) List

The U.S. EPA Region 9 office approved the State’s 303(d) list of impaired waterbodies on May 12, 1999. The list was prepared in accordance with section 303(d) of the CWA to identify specific water bodies where water quality standards are not expected to be met after implementation of technology-based effluent limitations on point sources. Alameda Creek and the lower San Francisco Bay are both listed as impaired waterbodies. The pollutants impairing lower San Francisco Bay include copper, mercury, nickel, PCBs total, dioxin TEQ and furan compounds, chlordane, DDT, dieldrin, diazinon, dioxin TEQ-like PCBs, and exotic species. Alameda Creek is impaired by diazinon.

The SIP requires final effluent limits for all 303(d)-listed pollutants to be based on total maximum daily loads (TMDLs) and wasteload allocation (WLA) results. The SIP and federal regulations also require that final concentration limits be included for all pollutants with reasonable potential. The SIP requires that where the Discharger has demonstrated infeasibility to meet the final limits, interim concentration limits, and performance-based mass limits for bioaccumulative pollutants, be established in the permit with a compliance schedule in effect until final effluent limits are adopted. The SIP also requires the inclusion of appropriate provisions for waste minimization and source control.

##### 3. Basis for Prohibitions

- a). Prohibition A.1 (no discharges other than as described in the permit): This prohibition is based on the Basin Plan, previous Order, and BPJ.

##### 4. Basis for Effluent Limitations

- a) Effluent Limitations B.1 (Residual Chlorine): There are no technology-based effluent limitation guidelines for reverse osmosis facilities. The residual chlorine limits is based on the existing permit and the Basin Plan (Chapter 4, p. 4-8, and Table 4-2, at p. 4-69).

- b) Effluent Limitation B.2 (pH): This effluent limit is unchanged from the existing permit. The limit is based on the Basin Plan (Chapter 4, Table 4-2), which is derived from federal requirements (40 CFR 133.102). This is an existing permit effluent limitation and compliance has been demonstrated by existing plant performance.
- c) Effluent Limitation B.3 (Discharge Flow): This effluent flow limit is based on the reliable treatment capacity of the plant. Exceedence of the plant's flow design capacity may result in lowering the reliability of compliance with water quality requirements, unless the Discharger demonstrates otherwise through an antidegradation study. This prohibition is based on 40 CFR 122.41(l).
- d) Effluent Limitation B.4 (Whole Effluent Acute Toxicity): The Basin Plan specifies a narrative objective for toxicity, requiring that all waters shall be maintained free of toxic substances in concentrations that are lethal to or produce other detrimental response on aquatic organisms. Detrimental response includes but is not limited to decreased growth rate, decreased reproductive success of resident or indicator species, and/or significant alternations in population, community ecology, or receiving water biota. These effluent toxicity limits are necessary to ensure that this objective is protected. The whole effluent acute toxicity limits for a three-sample median and single sample maximum are consistent with the previous Order and are based on the Basin Plan (Table 4-4, pg. 4-70).
- e) Effluent Limitation By Point of Reference – Findings 43 and 46 (Toxic Substances):
  - 1. Reasonable Potential Analysis (RPA):

40 CFR 122.44(d)(1)(i) specifies that permits are required to include WQBELs for all pollutants “which the Director determines are or may be discharged at a level which will cause, have the reasonable potential to cause, or contribute to an excursion above any State water quality standard”. Thus, the fundamental step in determining whether or not a WQBEL is required is to assess a pollutant’s reasonable potential of excursion of its applicable WQO or WQC. The following section describes the RPA methodology and the results of such an analysis for the pollutants identified in the Basin Plan and the CTR.

    - i) *WQOs and WQC*: The RPA involves the comparison of effluent data with appropriate WQOs including narrative toxicity objectives in the Basin Plan, applicable WQC in the CTR/NTR, and U.S. EPA’s 1986 Quality Criteria for Water. The Basin Plan objectives and CTR criteria are shown in Attachment 3 of this Fact Sheet.
    - ii) *Methodology*: The RPA is conducted using the method and procedures prescribed in Section 1.3 of the SIP. Board staff has analyzed the effluent and background data and the nature of facility operations to determine if the discharge has reasonable potential to cause or contribute to exceedances of applicable WQOs or WQC. Attachment 3 of this Fact Sheet shows the step-wise process described in Section 1.3 of the SIP.
    - iii) *Effluent and background data*: The RPA was based on effluent monitoring data submitted with the permit renewal application, sampled during 1996 and 2001. Four data points for most metals were available from 1996 sampling. 2001 effluent data include one data point for chromium (III and VI), mercury, cyanide, and dioxin; and 2002 effluent data include four additional measurements for copper. Two data points for most other priority pollutants in the CTR were available, one sample each from 1996 and

2001 (see Attachment 2 of this Fact Sheet). There are insufficient ambient background data available for Alameda Creek, to determine whether there is reasonable potential due to the second SIP trigger (B>WQO/WQC). By letter dated August 6, 2001 by Board staff, entitled Requirement for Monitoring of Pollutants in Effluent and Receiving Water to Implement New Statewide Regulations and Policy, the Board's Executive Officer required the Discharger conduct additional monitoring pursuant to section 13267 of the California Water Code. The Board staff will reevaluate RP, as appropriate, when these data become available.

- iv) *RPA determination*: The RPA results are shown below in Table B and Attachment 3 of this Fact Sheet. The pollutants that exhibit RP are copper and lead.

**Table B. Summary of Reasonable Potential Results**

# in CTR	PRIORITY POLLUTANTS	MEC or Minimum DL <sup>1</sup> (µg/L)	Governing WQO/WQC (ug/L)	Maximum Background (µg/L)	RPA Results <sup>2</sup>
2	Arsenic	1.6	190	NA	N
4	Cadmium	0.05	0.382	NA	N
5b	Chromium (VI)	10	11	NA	N
6	Copper	12	3.62	NA	Y
7	Lead	1.3	0.545	NA	Y
8	Mercury	0.002	0.025	NA	N
9	Nickel	3.7	48.8	NA	N
10	Selenium	0.6	5	NA	N
11	Silver	0.15	0.37	NA	Ud
13	Zinc	26	32.75	NA	Ud
14	Cyanide	10	5.2	NA	N
16	2,3,7,8-TCDD (Dioxin)	0.00043	1.4E-08	NA	N
17	Acrolein	10	780	NA	N
18	Acrylonitrile	2	0.66	NA	N
19	Benzene	1	71	NA	N
20	Bromoform	1	360	NA	N
21	Carbon Tetrachloride	1	4.4	NA	N
22	Chlorobenzene	2	21000	NA	N
23	Chlorodibromomethane	1	34	NA	N
24	Chloroethane	1	NA	NA	Uo
25	2-Chloroethylvinyl Ether	2	NA	NA	Uo
26	Chloroform	110	NA	NA	Uo
27	Dichlorobromomethane	7.2	46	NA	N
28	1,1-Dichloroethane	1	NA	NA	Uo
29	1,2-Dichloroethane	1	99	NA	N
30	1,1-Dichloroethylene	1	3.2	NA	N
31	1,2-Dichloropropane	1	39	NA	N
32	1,3-Dichloropropylene	2	1700	NA	N
33	Ethylbenzene	1	29000	NA	N
34	Methyl Bromide	8.4	4000	NA	N
35	Methyl Chloride	1	NA	NA	Uo
36	Methylene Chloride	5	1600	NA	N



# in CTR	PRIORITY POLLUTANTS	MEC or Minimum DL <sup>1</sup> (µg/L)	Governing WQO/WQC (ug/L)	Maximum Background (µg/L)	RPA Results <sup>2</sup>
37	1,1,2,2-Tetrachloroethane	1	11	NA	N
38	Tetrachloroethylene	1	8.85	NA	N
39	Toluene	1	200000	NA	N
40	1,2-Trans-Dichloroethylene	1	140000	NA	N
41	1,1,1-Trichloroethane	1	NA	NA	Uo
42	1,1,2-Trichloroethane	1	42	NA	N
43	Trichloroethylene	1	81	NA	N
44	Vinyl Chloride	1	525	NA	N
45	Chlorophenol	2	400	NA	N
46	2,4-Dichlorophenol	2	790	NA	N
47	2,4-Dimethylphenol	2	2300	NA	N
48	2-Methyl-4,6-Dinitrophenol	10	765	NA	N
49	2,4-Dinitrophenol	10	14000	NA	N
50	2-Nitrophenol	2	NA	NA	Uo
51	4-Nitrophenol	10	NA	NA	Uo
52	3-Methyl-4-Chlorophenol	5	NA	NA	Uo
53	Pentachlorophenol	10	7.9	NA	N
54	Phenol	2	4600000	NA	N
55	2,4,6-Trichlorophenol	2	6.5	NA	N
56	Acenaphthene	2	2700	NA	N
57	Acenaphthylene	2	NA	NA	Uo
58	Anthracene	2	110000	NA	N
59	Benzidine	5	0.00054	NA	N
60	Benzo(a)Anthracene	2	0.049	NA	N
61	Benzo(a)Pyrene	2	0.049	NA	N
62	Benzo(b)Fluoranthene	2	0.049	NA	N
63	Benzo(ghi)Perylene	2	NA	NA	Uo
64	Benzo(k)Fluoranthene	2	0.049	NA	N
65	Bis(2-Chloroethoxy)Methane	5	NA	NA	Uo
66	Bis(2-Chloroethyl)Ether	2	1.4	NA	N
67	Bis(2-Chloroisopropyl)Ether	2	170000	NA	N
68	Bis(2-Ethylhexyl)Phthalate	10	5.9	NA	N
69	4-Bromophenyl Phenyl Ether	5	NA	NA	Uo
70	Butylbenzyl Phthalate	5	5200	NA	N
71	2-Chloronaphthalene	2	4300	NA	N
72	4-Chlorophenyl Phenyl Ether	5	NA	NA	Uo
73	Chrysene	2	0.049	NA	N
74	Dibenzo(a,h)Anthracene	2	0.049	NA	N
75	1,2 Dichlorobenzene	1	17000	NA	N
76	1,3 Dichlorobenzene	1	2600	NA	N
77	1,4 Dichlorobenzene	1	2600	NA	N
78	3,3-Dichlorobenzidine	5	0.077	NA	N
79	Diethyl Phthalate	5	120000	NA	N
80	Dimethyl Phthalate	5	2900000	NA	N
81	Di-n-Butyl Phthalate	5	12000	NA	N
82	2,4-Dinitrotoluene	2	9.1	NA	N
83	2,6-Dinitrotoluene	5	NA	NA	Uo

# in CTR	PRIORITY POLLUTANTS	MEC or Minimum DL <sup>1</sup> (µg/L)	Governing WQO/WQC (ug/L)	Maximum Background (µg/L)	RPA Results <sup>2</sup>
84	Di-n-Octyl Phthalate	5	NA	NA	Uo
85	1,2-Diphenylhydrazine	5	0.54	NA	N
86	Fluoranthene	2	370	NA	N
87	Fluorene	2	14000	NA	N
88	Hexachlorobenzene	2	0.00077	NA	N
89	Hexachlorobutadiene	1	50	NA	N
90	Hexachlorocyclopentadiene	5	17000	NA	N
91	Hexachloroethane	2	8.9	NA	N
92	Indeno(1,2,3-cd) Pyrene	2	0.049	NA	N
93	Isophorone	2	600	NA	N
94	Naphthalene	2	NA	NA	Uo
95	Nitrobenzene	2	1900	NA	N
96	N-Nitrosodimethylamine	2	8.1	NA	N
97	N-Nitrosodi-n-Propylamine	2	1.4	NA	N
98	N-Nitrosodiphenylamine	2	16	NA	N
99	Phenanthrene	2	NA	NA	Uo
100	Pyrene	2	11000	NA	N
101	1,2,4-Trichlorobenzene	2	NA	NA	Uo
102	Aldrin	0.025	0.00014	NA	N
103	alpha-BHC	0.025	0.013	NA	N
104	beta-BHC	0.025	0.046	NA	N
105	Gamma-BHC	0.025	0.063	NA	N
106	delta-BHC	0.025	NA	NA	Uo
107	Chlordane	0.5	0.00059	NA	N
108	4,4'-DDT	0.15	0.00059	NA	N
109	4,4'-DDE	0.05	0.00059	NA	Y
110	4,4'-DDD	0.15	0.00084	NA	N
111	Dieldrin	0.05	0.00014	NA	Y
112	alpha-Endosulfan	0.05	0.0087	NA	N
113	beta-Endosulfan	0.05	0.0087	NA	N
114	Endosulfan Sulfate	0.15	240	NA	N
115	Endrin	0.05	0.0023	NA	N
116	Endrin Aldehyde	0.15	0.81	NA	N
117	Heptachlor	0.025	0.00021	NA	N
118	Heptachlor Epoxide	0.025	0.00011	NA	N
119-125	PCBs	5	0.00017	NA	N
126	Toxaphene	2	0.0002	NA	N
	Tributyltin	2	0.01	NA	N

- 1) Maximum Effluent Concentration (MEC) in bold is the actual detected MEC, otherwise the MEC shown is the minimum detection level.  
NA = Not Available (there is not monitoring data for this constituent).
- 2) RP = Yes, if (1) either MEC or Background > WQO/WQC.  
RP = No, if (1) both MEC and background < WQO/WQC or (2) no background and all effluent data non-detect, or no background and MEC < WQO/WQC  
RP = Ud (undetermined due to lack of effluent monitoring data).  
RP = Uo (undetermined if no objective promulgated).

- v) *Organic constituents with limited data:* Reasonable potential could not be determined for many of the organic priority or toxic pollutants due to (i) water quality objectives that are lower than current analytical techniques can measure, (ii) the absence of applicable WQOs or WQCs, or (iii) the absence of background data. As required by the August 6, 2001 letter from Board staff to all permittees, the Discharger is required to initiate or continue to monitor for those pollutants in this category using analytical methods that provide the best detection limits reasonably feasible. These pollutants' RP will be reevaluated in the future to determine whether there is a need to add numeric effluent limits to the permit or to continue monitoring.
- vi) *Uncertainties of RPA.* Board staff used the below analysis to determine the appropriate monitoring frequency for constituents that have WQO/WQC that are aquatic life driven. For silver and zinc, the RPA results are based on a limited data set of four samples. For mercury, the RPA results are based on a single sample. This limited data set may not accurately reflect the full range of concentrations for these constituents. To determine if a larger data set might trigger reasonable potential for these constituents, Board staff determined the maximum projected concentration of each constituent in accordance with the methodology described in Technical Support Document for Water Quality-Based Toxics Control (Technical Support Document) published by the USEPA Publication No. 505/2-90-001 and compared it with the most stringent water quality objective. For a 99% confidence level with only one data point (mercury) or four data points (silver and zinc), the Technical Support Document (p. 53-54) indicates that the projected MEC is determined by multiplying the actual MEC by 13.2 or 4.7, respectively. The results of this analysis are shown in the table below:

**Table C. Potential of Priority Pollutant Metals to Trigger Reasonable Potential**

<u>Constituent</u>	<u>Projected MEC (µg/L)</u>	<u>WQO/WQC (µg/L)</u>	<u>Projected MEC &gt; WQO/WQC = More data necessary?</u>
Mercury	0.026	0.025	Yes = annual monitoring
Silver	0.705	0.15	Yes = quarterly monitoring
Zinc	122.0	26	Yes = quarterly monitoring

- vii) *Pollutants with no reasonable potential:* WQBELs are not included in the Order for constituents that do not have reasonable potential to cause or contribute to exceedance of applicable WQOs or WQC. However, monitoring for some of those pollutants is still required, as specified in the Board's conditional approval of the Discharger's Sampling Plan. If concentrations of these constituents are found to have increased significantly, the Discharger will be required to investigate the source(s) of the increase(s). Remedial measures are required if the increases pose a threat to water quality in the receiving water.
- viii) *Permit reopener:* The permit includes a reopener provision to allow numeric effluent limits to be added for any constituent that in the future exhibits reasonable potential to cause or contribute to exceedance of a WQO or WQC. This determination, based on monitoring results, will be made by the Board.

2. **Final Water Quality-Based Effluent Limits:** The final WQBELs were developed for the toxic and priority pollutants that were determined to have reasonable potential to cause or contribute to exceedances of the WQOs or WQC. Final effluent limitations were calculated based on appropriate WQOs/WQC and the appropriate procedures specified in Section 1.4 of the SIP (See Attachment 4 of this Fact Sheet). For the purpose of the Proposed Order, final WQBELs refer to all non-interim effluent limitations. The WQO or WQC used for each pollutant with reasonable potential is indicated in Table C below as well as in Attachment 4.

**Table C. Water Quality Objectives/Criteria for Pollutants with RP**

Pollutant	Chronic WQO/WQC (µg/L)	Acute WQO/WQC (µg/L)	Basis of Lowest WQO/WQC Used in RP
Copper	3.62	4.80	Basin Plan
Lead	0.55	13.98	Basin Plan

3. **Interim Limits:** Interim effluent limitations were derived for those constituents for which the Discharger has shown infeasibility of complying with the respective limits and has demonstrated that compliance schedules are justified based on the Discharger's source control and pollution minimization efforts in the past and continued efforts in the present and future. As current sample results for copper and lead are not sufficient to perform a meaningful analysis, and the previous Order does not contain an effluent limitation for copper, this Order does not include an interim limit for copper. The Discharger will collect additional monitoring data under the requirements of the monitoring plan for this Order. When additional data become available, the Board will develop an interim limit, as appropriate.

#### **5. Basis for Receiving Water Limitations**

- a) Receiving water limitations C.1, C.2, and C.3 (conditions to be avoided): These limits are based on the previous Order and the narrative/numerical objectives contained in Chapter 3 of the Basin Plan, pages 3-2 to 3-5.
- b) Receiving water limitation C.4 (compliance with State Law): This requirement is in the previous permit, requires compliance with Federal and State law, and is self-explanatory.

#### **6. Basis for Self-Monitoring Requirements**

The SMP includes monitoring at the outfalls for conventional, non-conventional, and toxic pollutants, and acute toxicity. For the most part, the monitoring is the same as required by the previous Order. This Order requires monthly monitoring for copper and lead, to determine compliance with effluent limitations. As a result of the data review performed during the chlorine attenuation study, which showed that it could persist in the discharge, this Order requires monthly monitoring for residual chlorine. In lieu of near field discharge specific ambient monitoring, it is acceptable that the Discharger participate in collaborative receiving water monitoring with other dischargers under the provisions of the August 6, 2001 letter, and the RMP.

#### **7. Basis for Provisions**

- a) Provisions D.1. (Permit Compliance and Rescission of Previous Permit): Time of compliance is based on 40 CFR 122. The basis of this Order superceding and rescinding the previous permit Order is 40 CFR 122.46.
- b) Provision D.2 (Receiving Water Monitoring): This provision, which requires the Discharger to continue to conduct receiving water monitoring is based on the Basin Plan and the SIP.
- c) Provision D.3 (Whole Effluent Acute Toxicity): This provision establishes conditions by which compliance with permit effluent limits for acute toxicity will be demonstrated. Conditions initially include the use of 96-hour static renewal bioassays, the use of fathead minnow, rainbow trout, or three-spine stickleback as the test species, and the use of approved test methods as specified. On February 1, 2004, the Discharger shall switch from the 3<sup>rd</sup> to 5<sup>th</sup> Edition U.S. EPA protocol, unless it demonstrates that such a switch is not feasible.
- d) Provision D.4 (Copper Compliance Schedule): This provision, based on BPJ and SIP requirements, requires the Discharger to take specific actions to achieve compliance with the final effluent limitations for copper by March 30, 2010.
- e) Provision D.5 (Lead Compliance Schedule): This provision, based on BPJ and SIP requirements, requires the Discharger to take specific actions to achieve compliance with the final effluent limitations for lead by March 30, 2010.
- f) Provision D.6 (Operations and Maintenance Manual): These provisions are based on Section D.1 of Standard Provisions, and requirements of 40 CFR 122.41(e). An Operations and Maintenance Manual is required to assure the proper operations and maintenance of any process important for achieving compliance with this NPDES Order, such as the dechlorination system (sodium metabisulfite tank and pumps).
- g) Provision D.7 (Self-Monitoring Program): The Discharger is required to conduct monitoring of the permitted discharges in order to evaluate compliance with permit conditions. Monitoring requirements are contained in the Self Monitoring Program (SMP) of the Permit. This provision requires compliance with the SMP, and is based on 40 CFR 122.44(i), 122.62, 122.63 and 124.5. The SMP is a standard requirement in almost all NPDES permits issued by the Board, including this Order. It contains definitions of terms, specifies general sampling and analytical protocols, and sets out requirements for reporting of spills, violations, and routine monitoring data in accordance with NPDES regulations, the California Water Code, and Board's policies. The SMP also contains a sampling program specific for the facility. It defines the sampling stations and frequency, the pollutants to be monitored, and additional reporting requirements. Pollutants to be monitored include all parameters for which effluent limitations are specified. Monitoring for additional constituents, for which no effluent limitations are established, is also required to provide data for future completion of RPAs for them.
- h) Provision D.8 (Standard Provisions and Reporting Requirements): The purpose of this provision is require compliance with the standard provisions and reporting requirements given in this Board's document titled *Standard Provisions and Reporting Requirements for NPDES Surface Water Discharge Permits, August 1993* (the Standard Provisions), or any amendments thereafter. That document is incorporated in the permit as an attachment to it. Where provisions or reporting requirements specified in the permit are different from equivalent or related provisions or reporting requirements given in the Standard Provisions, the permit specifications shall apply.

The standard provisions and reporting requirements given in the above document are based on various state and federal regulations with specific references cited therein.

- i) Provision D.9 (Change in Control or Ownership): This provision is based on 40 CFR 122.61.
- j) Provision D.10 (Permit Reopener): This provision is based on 40 CFR 123
- k) Provision D.11 (NPDES Permit /U.S. EPA concurrence): This provision is based on 40 CFR 123.
- l) Provision D.12 (Permit Expiration and Reapplication): This provision is based on 40 CFR 122.46(a).

## **V. WASTE DISCHARGE REQUIREMENT APPEALS**

Any person may petition the State Water Resources Control Board to review the decision of the Board regarding the Waste Discharge Requirements. A petition must be made within 30 days of the Board public hearing.

## **VI. ATTACHMENTS**

- Attachment 1:** Effluent Data For Conventional Pollutants
- Attachment 2:** Effluent Data For Priority Pollutants
- Attachment 3:** RPA Results for Priority Pollutants
- Attachment 4:** Calculation of Final WQBELs
- Attachment 5:** General Basis for Final Compliance Dates

Attachment 1  
Effluent Data For Conventional Pollutants  
Bottling Group, LLC

Date	Flow gallons	pH pH units	Temperature deg. C		TSS mg/L	TDS mg/L	Residual Chlorine mg/L	Bioassays	
								Three-Spined Stickleback % Survival	Rainbow Trout
7-Jan-00	495,800	7.3	14.2						
14-Jan-00	494,900	6.9	15						
17-Jan-00	77,500	6.9	14.1	<	10	140	< 0.05		
20-Jan-00	365,700	7.5	15						
27-Jan-00	347,000	7.2	15						
4-Feb-00	318,800	7.2	15.6						
11-Feb-00	444,300	7.3	14.4						
14-Feb-00	69,900	7.4	15.2	<	10	168	< 0.05	100	90
18-Feb-00	483,700	7.2	15.6						
1-Mar-00	776,900	7.4	14.5						
10-Mar-00	699,500	7.1	15.6						
17-Mar-00	1,188,200	7.1	14.9						
20-Mar-00	71,000	7.1	16.2	<	10	274	< 0.05		
24-Mar-00	537,700	7.3	15.3						
31-Mar-00	754,800	7.5	16.3						
7-Apr-00	726,000	7.1	16.1						
15-Apr-00	708,000	7.5	17						
20-Apr-00	521,600	7.9	16	<	10	120	0.168		
28-Apr-00	1,234,300	7.5	15						
5-May-00	591,600	7	15.6						
12-May-00	524,000	6.4	15.9	<	10	116	< 0.05		
19-May-00	543,400	7.2	14.2						
26-May-00	709,900	7.4	15.7						
7-Jun-00	861,600	7.8	16.3						
12-Jun-00	507,300	8.3	20.4	<	10	186	< 0.05	100	100
14-Jun-00	760,400	7.3	17.3						
21-Jun-00	662,900	7.4	16.5						
28-Jun-00	708,400	7.8	17						
7-Jul-00	1,013,900	7.2	16.9						
10-Jul-00	166,000	7.5	18.4	<	10	5430	< 0.05		
14-Jul-00	673,900	7.4	16.3						
21-Jul-00	722,700	7.1	17						
28-Jul-00	633,100	7.1	17.4						
4-Aug-00	703,900	7.4	17.8						
7-Aug-00	169,200	7.3	17.6	<	10	326	0.056		
8-Aug-00	130,200	7.4	17.9					100	95
11-Aug-00	688,400	7.4	18.1						
18-Aug-00	800,900	7.2	17.7						
25-Aug-00	817,800	6.9	18.2						
8-Sep-00	1,547,100	7.4	18.7						
13-Sep-00	403,600	7.1	18.4	<	10	206	0.056		
15-Sep-00	695,200	7.4	18.7						
22-Sep-00	668,800	7.2	20						
29-Sep-00	613,700	7	18.9						
3-Oct-00	599,800	8.5	19.3	<	10	190	< 0.05		
5-Oct-00	259,500	7.2	19.4				< 0.05		
6-Oct-00	365,200	7.2	18.2						
13-Oct-00	553,600	7.1	18.1						
20-Oct-00	680,000	7.3	18.1						
27-Oct-00	664,100	6.9	17.9						
3-Nov-00	707,300	6.8	17.6						
6-Nov-00	230,200	6.9	17.7	<	10	134	< 0.05	95	100
9-Nov-00	388,000	6.9	16.9						
17-Nov-00	5,118,000	6.8	16.4						
22-Nov-00	436,300	6.8	16.2						
30-Nov-00	585,200	7.1	16.1						
8-Dec-00	748,200	6.9	16.1						
11-Dec-00	76,700	7.1	15.8	<	10	160	< 0.05		
16-Dec-00	556,700	7.3	15.4						
21-Dec-00	447,000	7.3	15.4						
29-Dec-00	724,800	6.7	15.1						
5-Jan-01	206,800	6.9	14.6						
12-Jan-01	753,800	7.1	14.4						
15-Jan-01	123,700	8.2	11.9	<	10	250	< 0.05		
19-Jan-01	576,900	7.7	14.3						
26-Jan-01	627,400	8.1	14.2						
2-Feb-01	702,200	7.5	14						
9-Feb-01	689,400	7.2	14						
16-Feb-01	600,600	7.3	13.4	<	10	88	< 0.05		
23-Feb-01	546,200	6.8	13.3						
2-Mar-01	648,200	7.1	13.1						
5-Mar-01	144,600	7.9	12.5	<	10	170	< 0.05	90	100
9-Mar-01	476,200	6.9	13.4						
16-Mar-01	679,000	6.9	13.4						
23-Mar-01	653,820	6.7	13.7						
30-Mar-01	665,920	6.7	14.2						
6-Apr-01	753,533	7.1	14.1						

Attachment 1  
Effluent Data For Conventional Pollutants  
Bottling Group, LLC

Date	Flow gallons	pH pH units	Temperature deg. C		TSS mg/L	TDS mg/L	Residual Chlorine mg/L	Bioassays	
								Three-Spined Stickleback % Survival	Rainbow Trout
13-Apr-01	710,667	6.9	14.4						
18-Apr-01	412,600	7.2	13.2	<	10	284	< 0.05		
20-Apr-01	225,400	6.9	13.8						
27-Apr-01	684,700	6.9	15.3						
4-May-01	554,600	7.3	16						
11-May-01	722,100	7.4	15.1						
18-May-01	820,000	7.8	14.9						
21-May-01	293,400	7.1	15.1	<	1	230	< 0.05		
25-May-01	155,100	7.2	15.3					95	100
31-May-01	516,300	7.4	15.6						
8-Jun-01	879,100	7.3	15						
15-Jun-01	815,400	7.8	15.3						
22-Jun-01	725,200	7.1	15.2	<	10	170	< 0.05		
29-Jun-01	715,400	6.9	15.3						
6-Jul-01	676,600	7.2	16.4						
13-Jul-01	860,900	6.9	17.1						
20-Jul-01	797,600	7.4	17						
27-Jul-01	690,922	6.8	15.7						
30-Jul-01	165,075	7.4	15.5	<	10	160	< 0.05		
3-Aug-01	474,800	7.4	16.6						
10-Aug-01	161,548	6.5	16.2						
14-Aug-01	331,000	8.5	16.2		2	240	< 0.05		
17-Aug-01	710,700	7.3	15.3					100	100
24-Aug-01	43,580	7.4	16.6						
31-Aug-01	735,120	7.3	17.9						
7-Sep-01	1,242,780	6.8	17.7						
11-Sep-01	449,800	7.5	17.6	<	10	250	< 0.05		
13-Sep-01	658,200	7.1	18.9						
21-Sep-01	134,960	7.1	16.9						
28-Sep-01	247,850	6.7	16.3						
5-Oct-01	655,500	7.2	17.1						
9-Oct-01	265,600	7.2	16.8	<	10	140	< 0.05		
12-Oct-01	739,800	6.9	17.7						
19-Oct-01	798,300	7.1	17.4						
26-Oct-01	329,000	7.3	17						
2-Nov-01	658,000	7.4	17						
9-Nov-01	842,100	7.4	17.2						
16-Nov-01	622,500	7.3	17.1						
23-Nov-01	722,900	7.5	16.8						
30-Nov-01	706,100	7	16.7						
7-Dec-01	619,100	7.4	16.4						
13-Dec-01	562,800	6.9	16.1						
17-Dec-01	136,700	7.4	14.1		1	310	< 0.05	100	100
21-Dec-01	548,500	7.1	15.8						
28-Dec-01	517,600	7.4	16.6		2	330	< 0.05		
4-Jan-02	1,106,020	7.17	14.8						
10-Jan-02	1,557,440	7.56	15.0						
18-Jan-02	1,863,790	7.14	14.0						
21-Jan-02	346,100			<	1	190	< 0.05		
24-Jan-02	1,299,170	7.1	12.2						
31-Jan-02	1,678,000	6.86	13.3						
4-Feb-02	807,410	7.7	12.2	<	10	220	< 0.05		
8-Feb-02	1,788,250	7.28	13.6						
14-Feb-02	1,922,790	7.38	14.9						
23-Feb-02	2,082,920	7.4	13.9						
7-Mar-02	5,687,740	7.3	12.5	<	1	160	< 0.05	75	100
8-Mar-02	291,320	7.03	13.3						
15-Mar-02	2,432,600	7.06	13.2						
22-Mar-02	2,524,030	6.67	12.7						
29-Mar-02	2,648,520	6.68	12.9						
1-Apr-02	156,200	7.5	13	<	1	130	< 0.05	90	100
5-Apr-02	540,600	7	13.3						
12-Apr-02	806,600	7.2	12.9						
19-Apr-02	916,600	7.1	13.1						
26-Apr-02	478,000	7.1	13.2						
3-May-02	982,000	7.2	13.8						
6-May-02	351,300	7.7	13.5	<	10	180	< 0.05		
10-May-02	654,000	7.2	13.4						
17-May-02	887,800	7.4	13.9						
24-May-02	889,800	7.3	14.2						
31-May-02	623,100	7.2	13.9						
3-Jun-02	384,800	7.2	14.5	<	10	200	< 0.05		
7-Jun-02	368,600	7.4	14.1						
14-Jun-02	739,400	6.7	14.3						
21-Jun-02	799,000	7.3	14.6						
28-Jun-02	866,000	7.6	14.8						
5-Jul-02	833,000	7	15.8						



Attachment 1  
Effluent Data For Conventional Pollutants  
Bottling Group, LLC

Date	Flow gallons	pH	Temperature		TSS		TDS		Residual Chlorine	Bioassays	
		pH units	deg. C		mg/L		mg/L		mg/L	Three-Spined Stickleback % Survival	Rainbow Trout
8-Jul-02	385,600	6.9	16.2	<	1		240	<	0.05		
11-Jul-02	366,700	7	15.8								
17-Jul-02	532,700	7.1	18.3								
24-Jul-02	679,200	7	17.8								
2-Aug-02	956,700	6.8	15.8								
5-Aug-02	139,100	7.1	20	<	10		150	<	0.05		
9-Aug-02	447,800	6.4	16								
16-Aug-02	736,900	6.9	15.6								
23-Aug-02	889,700	6.7	15.2								
30-Aug-02	905,100	6.6	15.8								
3-Sep-02	293,100	6.6	15.5	<	10		130	<	0.05		
6-Sep-02	407,000	6.9	15.6								
13-Sep-02	674,800	6.6	15.8								
20-Sep-02	723,900	7.3	16.3								
27-Sep-02	649,200	6.5	16								
Maximum		8.5	20.4		10		5430		0.168	100	100
Minimum		6.4	11.9	<	1		88	<	0.05	75	90
Average			15.68				353.70				

Attachment 2  
Effluent Data for Priority Pollutants  
(Adapted from Permit Renewal Application Data Set)  
Bottling Group, LLC

		6/17/96	6/18/96	6/19/96	6/21/96	7/12/96	6/4/01	6/4/01	3/7/02	4/1/02	7/8/02	10/7/02	MEC
1	Antimony	2.9	0.34	0.24	0.15								2.9
2	Arsenic <sup>B</sup>	0.78	1.4	1.6	0.49								1.6
3	Beryllium	< 0.05	< 0.05	< 0.05	< 0.05								< 0.05
4	Cadmium	0.04	0.04	0.05	< 0.02								0.05
5a	Chromium (III)	1.6	1.3	1.3	0.98		6.4						6.4
5b	Chromium (VI)						< 10						< 10
6	Copper	8.4	8.8	12	4.8				1.6	< 5.0	1.8	2.2	12
7	Lead	0.84	0.82	1.3	< 0.3								1.3
8	Mercury	0.02	< 0.02	0.04	< 0.02		0.002						0.002
9	Nickel	2.7	3.7	2	1.7								3.7
10	Selenium	< 0.6	< 0.6	< 0.6	< 0.6								< 0.6
11	Silver	0.15	0.15	< 0.1	< 0.1								0.15
12	Thallium	0.01	0.01	0.01	< 0.01								0.01
13	Zinc	23	18	26	21								26
14	Cyanide						< 10						< 10
15	Asbestos												
16	2,3,7,8 TCDD						< 0.00043						< 0.00043
17	Acrolein							< 10					< 10
18	Acrylonitrile							< 2					< 2
19	Benzene					< 2		< 1					< 1
20	Bromofom					< 2		< 1					< 1
21	Carbon Tetrachloride					< 2		< 1					< 1
22	Chlorobenzene					< 2							< 2
23	Chlorodibromomethane					< 2		< 1					1
24	Chloroethane							< 1					1
25	2-Chloroethylvinyl ether					< 10		< 2					2
26	Chloroform					110		76					110
27	Dichlorobromomethane					7.2		2.3					7.2
28	1,1-Dichloroethane					< 2		< 1					< 1
29	1,2-Dichloroethane					< 2		< 1					< 1
30	1,1-Dichloroethylene					< 2		< 1					< 1
31	1,2-Dichloropropane					< 2		< 1					< 1
32	1,3-Dichloropropylene					< 2		< 1					< 1
33	Ethylbenzene					< 2		< 1					< 1
34	Methyl Bromide					8.4		< 1					8.4
35	Methyl Chloride					< 2		< 1					< 1
36	Methylene Chloride					< 5							< 5
37	1,1,2,2-Tetrachloroethane					< 2		< 1					< 1
38	Tetrachloroethylene					< 2		< 1					< 1
39	Toluene					< 2		< 1					< 1
40	1,2-Trans-Dichloroethylene					< 2		< 1					< 1
41	1,1,1-Trichloroethane					< 2		< 1					< 1
42	1,1,2-Trichloroethane					< 2		< 1					< 1
43	Trichloroethylene					< 2		< 1					< 1
44	Vinyl Chloride					< 2		< 1					< 1
45	2-Chlorophenol					< 2							< 2
46	2,4-Dichlorophenol						< 2						< 2
47	2,4-Dimethylphenol						< 2						< 2
48	2-Methyl- 4,6-Dinitrophenol						< 10						< 10
49	2,4-Dinitrophenol						< 10						< 10
50	2-Nitrophenol					< 5	< 2						< 2
51	4-Nitrophenol					< 10	< 10						< 10
52	3-Methyl 4-Chlorophenol					< 5	< 5						< 5
53	Pentachlorophenol					< 10	< 10						< 10
54	Phenol					< 5	< 2						< 2
55	2,4,6-Trichlorophenol					< 5	< 2						< 2
56	Acenaphthene					< 5	< 2						< 2
57	Acenaphthylene					< 5	< 2						< 2
58	Anthracene					< 5	< 2						< 2
59	Benzdine												
60	Benzo(a)Anthracene					< 5	< 2						< 2
61	Benzo(a)Pyrene					< 5	< 2						< 2
62	Benzo(b)Fluoranthene					< 5	< 2						< 2
63	Benzo(ghi)Perylene					< 5	< 2						< 2
64	Benzo(k)Fluoranthene					< 5	< 2						< 2
65	Bis(2-Chloroethoxy)Methane					< 5	< 5						< 5
66	Bis(2-Chloroethyl)Ether					< 5	< 2						< 2
67	Bis(2-Chloroisopropyl)Ether					< 5	< 2						< 2
68	Bis(2-Ethylhexyl)Phthalate					< 10	< 10						< 10
69	4-Bromophenyl Phenyl Ether					< 5	< 5						< 5
70	Butylbenzyl Phthalate					< 5	< 5						< 5
71	2-Chloronaphthalene					< 5	< 2						< 2
72	4-Chlorophenyl Phenyl Ether					< 5	< 5						< 5
73	Chrysene					< 5	< 2						< 2
74	Dibenzo(a,h)Anthracene					< 5	< 2						< 2
75	1,2-Dichlorobenzene					< 5	< 2	< 1					< 1
76	1,3-Dichlorobenzene					< 5	< 2	< 1					< 1

Attachment 2  
Effluent Data for Priority Pollutants  
(Adapted from Permit Renewal Application Data Set)  
Bottling Group, LLC

		6/17/96	6/18/96	6/19/96	6/21/96	7/12/96	6/4/01	6/4/01	3/7/02	4/1/02	7/8/02	10/7/02	MEC
77	1,4-Dichlorobenzene					< 5	< 2	< 1					< 1
78	3,3-Dichlorobenzidine					< 10	< 5						< 5
79	Diethyl Phthalate					< 5	< 5						< 5
80	Dimethyl Phthalate					< 5	< 5						< 5
81	Di-n-Butyl Phthalate					< 10	< 5						< 5
82	2,4-Dinitrotoluene					< 5	< 2						< 2
83	2,6-Dinitrotoluene					< 5	< 5						< 5
84	Di-n-Octyl Phthalate					< 5	< 5						< 5
85	1,2-Diphenylhydrazine												
86	Fluoranthene					< 5	< 2						< 2
87	Fluorene					< 5	< 2						< 2
88	Hexachlorobenzene					< 5	< 2						< 2
89	Hexachlorobutadiene					< 5	< 2	< 1					< 1
90	Hexachlorocyclopentadiene					< 10	< 5						< 5
91	Hexachloroethane					< 5	< 2						< 2
92	Indeno(1,2,3-cd)Pyrene					< 5	< 2						< 2
93	Isophorone					< 5	< 2						< 2
94	Naphthalene					< 5	< 2						< 2
95	Nitrobenzene					< 5	< 2						< 2
96	N-Nitrosodimethylamine												
97	N-Nitrosodi-n-Propylamine					< 5	< 2						< 2
98	N-Nitrosodiphenylamine					< 5	< 2						< 2
99	Phenanthrene					< 5	< 2						< 2
100	Pyrene					< 5	< 2						< 2
101	1,2,4-Trichlorobenzene					< 5	< 2						< 2
102	Aldrin					< 0.025							< 0.025
103	alpha-BHC					< 0.025							< 0.025
104	beta-BHC					< 0.025							< 0.025
105	gamma-BHC					< 0.025							< 0.025
106	delta-BHC					< 0.025							< 0.025
107	Chlordane					< 0.5							< 0.5
108	4,4'-DDT					< 0.15							< 0.15
109	4,4'-DDE (linked to DDT)					< 0.05							< 0.05
110	4,4'-DDD					< 0.15							< 0.15
111	Dieldrin					< 0.05							< 0.05
112	alpha-Endosulfan					< 0.05							< 0.05
113	beta-Endosulfan					< 0.05							< 0.05
114	Endosulfan Sulfate					< 0.15							< 0.15
115	Endrin					< 0.05							< 0.05
116	Endrin Aldehyde					< 0.15							< 0.15
117	Heptachlor					< 0.025							< 0.025
118	Heptachlor Epoxide					< 0.025							< 0.025
119-125	PCBs sum (2)					< 5							< 5
126	Toxaphene					< 2							< 2
	Tributyltin					< 2							< 2
	Note:												
	Mercury - Effluent data from 1996 showed two detected values, 0.02 ug/L and 0.04 ug/L. This data, however, was collected prior to the use of recommended ultraclean sampling and low level analytical methods. The data point from 2001, 0.002, represents the only available data point collected using the recommended sampling methods. Additional data for mercury using ultraclean methods are being collected as required by the August 6, 2001 letter. The Regional Board will continue to evaluate reasonable potential as these data become available, as necessary.												

Attachment 3  
Reasonable Potential Analysis  
Bottling Group, LLC  
January 20, 2003

Green highlight checks for Input Inconsistency  
Yellow highlights are user input

Beginning		Step 2		Step 3		Step 4		Step 5		Step 6		Steps 7 & 8		Final Result	
	Constituent name	C (ug/L) Lowest (most stringent) Criteria (Enter "No Criteria" for no criteria)	Effluent Data Available (Y/N)?	Are all data points non-detects (Y/N)?	If all data points are ND and MinDL-C, interim monitoring is required	Enter the pollutant data min detection limit (MDL) (ug/L)	Enter the pollutant data max conc (ug/L)	Maximum Pollutant Concentration from (MEC-C deleted max value; if all ND & MDL-C then MEC = MDL)	MEC vs. C	B (ug/L)	B vs. C	7) Review other information in the SIP page 4. If information is unavailable or insufficient, 8) the RWQCB shall establish interim monitoring requirements.		RPA Result Reason	
1	Antimony	4,300	Y	Y		2.9	2.9	2.9	MEC-C, go to Step 5	No ambient data	No ambient data, to Step 7	No	UD; MEC-C & no B	No	UD; MEC-C & no B
2	Arsenic *	190	Y	Y		1.6	1.6	1.6	MEC-C, go to Step 5	No ambient data	No ambient data, to Step 7	No	UD; MEC-C & no B	No	UD; MEC-C & no B
3	Beryllium	No Criteria	Y	Y	No Criteria	0.05	0.05	No Criteria	No Criteria	No ambient data	No Criteria	No	No Criteria	No	No Criteria
4	Cadmium *	0.382	Y	Y		6.4	6.4	6.4	MEC-C, go to Step 5	No ambient data	No ambient data, to Step 7	No	UD; MEC-C & no B	No	UD; MEC-C & no B
5a	Chromium (III)	66.50	Y	Y		10	10	10	MEC-C, go to Step 5	No ambient data	No ambient data, to Step 7	No	UD; MEC-C & no B	No	UD; MEC-C & no B
5b	Chromium (VI) *	11.00	Y	Y	All ND, MDL-C, MEC=MDL				MEC-C, go to Step 5	No ambient data	No ambient data, to Step 7	No	UD; MEC-C & no B	No	UD; MEC-C & no B
6	Copper (303d listed) *	3.617	Y	Y		12	12	12	MEC-C, go to Step 5	No ambient data	No ambient data, to Step 7	No	UD; MEC-C & no B	Yes	MEC-C
7	Lead *	0.545	Y	Y		1.3	1.3	1.3	MEC-C, go to Step 5	No ambient data	No ambient data, to Step 7	Yes	MEC-C	Yes	MEC-C
8	Mercury (303d listed) **	0.025	Y	Y		0.002	0.002	0.002	MEC-C, go to Step 5	No ambient data	No ambient data, to Step 7	No	UD; MEC-C & no B	No	UD; MEC-C & no B
9	Nickel *	48.80	Y	Y		3.7	3.7	3.7	MEC-C, go to Step 5	No ambient data	No ambient data, to Step 7	No	UD; MEC-C & no B	No	UD; MEC-C & no B
10	Selenium (303d listed) *	5.00	Y	Y	All ND, MDL-C, MEC=MDL				MEC-C, go to Step 5	No ambient data	No ambient data, to Step 7	No	UD; MEC-C & no B	No	UD; MEC-C & no B
11	Silver *	0.37999	Y	Y		0.15	0.15	0.15	MEC-C, go to Step 5	No ambient data	No ambient data, to Step 7	No	UD; MEC-C & no B	No	UD; MEC-C & no B
12	Thallium	6.30	Y	Y		0.01	0.01	0.01	MEC-C, go to Step 5	No ambient data	No ambient data, to Step 7	No	UD; MEC-C & no B	No	UD; MEC-C & no B
13	Zinc *	32.75	Y	Y		26	26	26	MEC-C, go to Step 5	No ambient data	No ambient data, to Step 7	No	UD; MEC-C & no B	No	UD; MEC-C & no B
14	Cyanide *	5.20	Y	Y	All ND, MinDL-C, Go to Step 5, & 1				MEC-C, go to Step 5	No ambient data	No ambient data, to Step 7	No	MDL-C & no B	No	MDL-C & no B
15	Asbestos	No Criteria	Y	Y	No Criteria			No Criteria	No Criteria	No ambient data	No Criteria	Uo	No Criteria	Uo	No Criteria
16	2,3,7,8 TCDD (303d listed)	0.000000014	Y	Y	All ND, MinDL-C, Go to Step 5, & 1				MEC-C, go to Step 5	No ambient data	No ambient data, to Step 7	No	MDL-C & no B	No	MDL-C & no B
17	Acrolein	780	Y	Y	All ND, MDL-C, MEC=MDL				MEC-C, go to Step 5	No ambient data	No ambient data, to Step 7	No	UD; MEC-C & no B	No	UD; MEC-C & no B
18	Acrylonitrile	0.66	Y	Y	All ND, MinDL-C, Go to Step 5, & 1				MEC-C, go to Step 5	No ambient data	No ambient data, to Step 7	No	MDL-C & no B	No	MDL-C & no B
19	Benzene	360	Y	Y	All ND, MDL-C, MEC=MDL				MEC-C, go to Step 5	No ambient data	No ambient data, to Step 7	No	UD; MEC-C & no B	No	UD; MEC-C & no B
20	Bromofom	71	Y	Y	All ND, MDL-C, MEC=MDL				MEC-C, go to Step 5	No ambient data	No ambient data, to Step 7	No	UD; MEC-C & no B	No	UD; MEC-C & no B
21	Carbon Tetrachloride	4.4	Y	Y	All ND, MDL-C, MEC=MDL				MEC-C, go to Step 5	No ambient data	No ambient data, to Step 7	No	UD; MEC-C & no B	No	UD; MEC-C & no B
22	Chlorobenzene	21,000	Y	Y	All ND, MDL-C, MEC=MDL				MEC-C, go to Step 5	No ambient data	No ambient data, to Step 7	No	UD; MEC-C & no B	No	UD; MEC-C & no B
23	Chlorodibromomethane	34	Y	Y	All ND, MDL-C, MEC=MDL				MEC-C, go to Step 5	No ambient data	No ambient data, to Step 7	No	UD; MEC-C & no B	No	UD; MEC-C & no B
24	Chloroethane	No Criteria	Y	Y	No Criteria			No Criteria	No Criteria	No ambient data	No Criteria	Uo	No Criteria	Uo	No Criteria
25	2-Chloroethylvinyl ether	No Criteria	Y	Y	No Criteria			No Criteria	No Criteria	No ambient data	No Criteria	Uo	No Criteria	Uo	No Criteria
26	Chloroform	No Criteria	Y	Y	No Criteria			No Criteria	No Criteria	No ambient data	No Criteria	Uo	No Criteria	Uo	No Criteria
27	Dichlorobromomethane	46	Y	Y	No Criteria				MEC-C, go to Step 5	No ambient data	No ambient data, to Step 7	No	UD; MEC-C & no B	No	UD; MEC-C & no B
28	1,1-Dichloroethane	No Criteria	Y	Y	No Criteria			No Criteria	No Criteria	No ambient data	No Criteria	Uo	No Criteria	Uo	No Criteria
29	1,2-Dichloroethane	99	Y	Y	All ND, MDL-C, MEC=MDL				MEC-C, go to Step 5	No ambient data	No ambient data, to Step 7	No	UD; MEC-C & no B	No	UD; MEC-C & no B
30	1,1-Dichloroethylene	3.2	Y	Y	All ND, MDL-C, MEC=MDL				MEC-C, go to Step 5	No ambient data	No ambient data, to Step 7	No	UD; MEC-C & no B	No	UD; MEC-C & no B
31	1,2-Dichloropropane	39	Y	Y	All ND, MDL-C, MEC=MDL				MEC-C, go to Step 5	No ambient data	No ambient data, to Step 7	No	UD; MEC-C & no B	No	UD; MEC-C & no B
32	1,3-Dichloropropylene	1,700	Y	Y	All ND, MDL-C, MEC=MDL				MEC-C, go to Step 5	No ambient data	No ambient data, to Step 7	No	UD; MEC-C & no B	No	UD; MEC-C & no B
33	Ethylbenzene	29,000	Y	Y	All ND, MDL-C, MEC=MDL				MEC-C, go to Step 5	No ambient data	No ambient data, to Step 7	No	UD; MEC-C & no B	No	UD; MEC-C & no B
34	Methyl Bromide	4,000	Y	Y	All ND, MDL-C, MEC=MDL				MEC-C, go to Step 5	No ambient data	No ambient data, to Step 7	No	UD; MEC-C & no B	No	UD; MEC-C & no B
35	Methyl Chloride	No Criteria	Y	Y	No Criteria			No Criteria	No Criteria	No ambient data	No Criteria	Uo	No Criteria	Uo	No Criteria
36	Methylene Chloride	1,600	Y	Y	All ND, MDL-C, MEC=MDL				MEC-C, go to Step 5	No ambient data	No ambient data, to Step 7	No	UD; MEC-C & no B	No	UD; MEC-C & no B
37	1,1,2,2-Tetrachloroethan	11	Y	Y	All ND, MDL-C, MEC=MDL				MEC-C, go to Step 5	No ambient data	No ambient data, to Step 7	No	UD; MEC-C & no B	No	UD; MEC-C & no B
38	Tetrachloroethylene	8.85	Y	Y	All ND, MDL-C, MEC=MDL				MEC-C, go to Step 5	No ambient data	No ambient data, to Step 7	No	UD; MEC-C & no B	No	UD; MEC-C & no B
39	Toluene	200,000	Y	Y	All ND, MDL-C, MEC=MDL				MEC-C, go to Step 5	No ambient data	No ambient data, to Step 7	No	UD; MEC-C & no B	No	UD; MEC-C & no B
40	1,2-Trans-Dichloroethyle	140,000	Y	Y	No Criteria			No Criteria	No Criteria	No ambient data	No Criteria	Uo	No Criteria	Uo	No Criteria
41	1,1,1-Trichloroethane	No Criteria	Y	Y	No Criteria			No Criteria	No Criteria	No ambient data	No Criteria	Uo	No Criteria	Uo	No Criteria
42	1,1,2-Trichloroethane	42	Y	Y	All ND, MDL-C, MEC=MDL				MEC-C, go to Step 5	No ambient data	No ambient data, to Step 7	No	UD; MEC-C & no B	No	UD; MEC-C & no B
43	Trichloroethylene	81	Y	Y	All ND, MDL-C, MEC=MDL				MEC-C, go to Step 5	No ambient data	No ambient data, to Step 7	No	UD; MEC-C & no B	No	UD; MEC-C & no B
44	Vinyl Chloride	525	Y	Y	All ND, MDL-C, MEC=MDL				MEC-C, go to Step 5	No ambient data	No ambient data, to Step 7	No	UD; MEC-C & no B	No	UD; MEC-C & no B
45	2-Chlorophenol	400	Y	Y	All ND, MDL-C, MEC=MDL				MEC-C, go to Step 5	No ambient data	No ambient data, to Step 7	No	UD; MEC-C & no B	No	UD; MEC-C & no B
46	2,4-Dichlorophenol	790	Y	Y	All ND, MDL-C, MEC=MDL				MEC-C, go to Step 5	No ambient data	No ambient data, to Step 7	No	UD; MEC-C & no B	No	UD; MEC-C & no B
47	2,4-Dimethylphenol	2,300	Y	Y	All ND, MDL-C, MEC=MDL				MEC-C, go to Step 5	No ambient data	No ambient data, to Step 7	No	UD; MEC-C & no B	No	UD; MEC-C & no B
48	2-Methyl-4,6-Dinitrophen	765	Y	Y	All ND, MDL-C, MEC=MDL				MEC-C, go to Step 5	No ambient data	No ambient data, to Step 7	No	UD; MEC-C & no B	No	UD; MEC-C & no B
49	2,4-Dinitrophenol	14,000	Y	Y	All ND, MDL-C, MEC=MDL				MEC-C, go to Step 5	No ambient data	No ambient data, to Step 7	No	UD; MEC-C & no B	No	UD; MEC-C & no B
50	2-Nitrophenol	No Criteria	Y	Y	No Criteria			No Criteria	No Criteria	No ambient data	No Criteria	Uo	No Criteria	Uo	No Criteria
51	4-Nitrophenol	No Criteria	Y	Y	No Criteria			No Criteria	No Criteria	No ambient data	No Criteria	Uo	No Criteria	Uo	No Criteria
52	3-Methyl 4-Chlorophenol	No Criteria	Y	Y	No Criteria			No Criteria	No Criteria	No ambient data	No Criteria	Uo	No Criteria	Uo	No Criteria
53	Pentachlorophenol	8,200	Y	Y	All ND, MinDL-C, Go to Step 5, & 1				MEC-C, go to Step 5	No ambient data	No ambient data, to Step 7	No	MDL-C & no B	No	MDL-C & no B
54	Phenol	4,600,000	Y	Y	All ND, MinDL-C, MEC=MDL				MEC-C, go to Step 5	No ambient data	No ambient data, to Step 7	No	UD; MEC-C & no B	No	UD; MEC-C & no B

## Bottling Group, LLC

[illegible]

**Attachment 3**  
**Reasonable Potential Analysis**  
 Bottling Group, LLC  
 January 20, 2003

Beginning	July 1, 2005				Step 4	Step 5	Step 6	Steps 7 & 8	Final Result
Constituent name	C (ug/L) Lowest (most stringent) Criteria (Enter "No Criteria" for no criteria)	Step 2	Step 3	Step 4	Step 5	Step 6	Step 7	Step 8	Final Result
		Are all data points non-detects (Y/N)?	Enter the effluent max conc limit (MDL) (ug/L)	Maximum Pollutant Concentration from (MEC= deleted max value; if all ND & MDL < C then MEC = MDL)	MEC vs. C	B (ug/L)	B vs. C	7) Review other information in the SIP page 4. If information is unavailable or insufficient: 8) the RWOCB shall establish interim monitoring requirements.	RPA Result
117 Heptachlor	0.00021	Y	Y	0.025	All ND, MinDL < C, Go to Step 5, & I	No ambient data to Step 7	No ambient data to Step 7	No	MDL < C & no B
118 Heptachlor Epoxide	0.00011	Y	Y	0.025	All ND, MinDL < C, Go to Step 5, & I	No ambient data to Step 7	No ambient data to Step 7	No	MDL < C & no B
119-125 p,p'-DDE sum (a)	0.00017	Y	Y	5	All ND, MinDL < C, Go to Step 5, & I	No ambient data to Step 7	No ambient data to Step 7	No	MDL < C & no B
126 Toxaphene	0.00020	Y	Y	2	All ND, MinDL < C, Go to Step 5, & I	No ambient data to Step 7	No ambient data to Step 7	No	MDL < C & no B
Triphenyltin	0.01000	Y	Y	2	All ND, MinDL < C, Go to Step 5, & I	No ambient data to Step 7	No ambient data to Step 7	No	MDL < C & no B

a. According to Table 1 of Section 6(X) of CTR (40CFR 131.38), those criteria should use Basin Plan objectives; criteria for Se and CN are specified by the NTR.

Under the Basin Plan and CTR definitions, receiving water is freshwater.

Therefore, freshwater criteria apply.

b. Criteria for copper for copper is expressed as dissolved metals. The copper criteria in the table is adjusted by dividing a factor of 0.83 to convert the dissolved to total metal concentration.

The criteria for selenium is taken from CTR. CTR criteria for selenium is taken from NTR.

c. Acronyms in the "Final Result" column:

UL: Cannot determine reasonable potential due to the absence of data, or because Minimum DL is greater than water quality objective or CTR criteria

IM: Interim monitoring is required

DL: Detection limit above water quality objective or CTR criteria

Y(B): Reasonable potential due to ambient data exceedances

d. Refer to the table entitled "Metal Criteria after Adjusting Hardness" for detailed determination of the criteria C in shaded area.

e. Mercury - Effluent data from 1996 showed two detected values, 0.02 ug/L and 0.04 ug/L. This data, however, was collected prior to the use of recommended ultraclean sampling and low level analytical methods. The data point from 2001, 0.002, represents the only available data point collected using the recommended sampling methods. Additional data for mercury using ultraclean methods are being collected as required by the August 6, 2001 letter. The Regional Board will continue to evaluate reasonable potential as these data become available, as necessary.

Attachment 4  
Effluent Limitation Calculations (Per Section 1.4 of the SIP)  
Bottling Group, LLC

Note: Numbers in blue have formula in the cells - calculates values automatically

PRIORITY POLLUTANTS	Copper	Lead
Basis and Criteria type	BP FW (4-d, 1-hr avg)	BP FW (4-d, 1-hr avg)
Lowest WQO	3.62	0.545
Translators		
Dilution Factor (D) (if applicable)	0	0
no. of samples per month	4	4
Aquatic life criteria required? (Y/N)	Y	Y
HH criteria analysis required? (Y/N)	N	N
Applicable Acute WQO	4.8	13.98
Applicable Chronic WQO	3.62	0.545
HH criteria		
Background (max conc)		
Background (avg conc for HH calc)		
Is the pollutant Bioaccumulative(Y/N)? (e.g., Hg)	N	N
ECA acute	4.8	14.0
ECA chronic	3.62	0.545
ECA HH		
No. of data points <10 or atleast 80% of data reported non detect? (Y/N)	Y	Y
avg of data points		
SD		
CV calculated	N/A	N/A
CV (Selected) - Final	0.60	0.60
ECA acute mult99	0.32	0.32
ECA chronic mult99	0.53	0.53
LTA acute	1.54	4.49
LTA chronic	1.91	0.29
minimum of LTAs	1.54	0.29
AMEL mult95	1.55	1.55
MDEL mult99	3.11	3.11
AMEL (aq life)	2.39	0.45
MDEL(aq life)	4.80	0.90
MDEL/AMEL Multiplier	2.01	2.01
AMEL (human hith)		
MDEL (human hith)		
minimum of AMEL for Aq. life vs HH	2.39	0.45
minimum of MDEL for Aq. Life vs HH	4.80	0.90
Current limit in permit (30-d avg)	N/A	N/A
Current limits in permit (daily)	N/A	N/A
Final limit - AMEL	2.39	0.45
Final limit - MDEL	4.80	0.90
Max Effi Conc (MEC)	12	1.3
Interim Limits for those where TMDL is final limit		

# Attachment 5

## General Basis for Final Compliance Dates

*Revised September 28, 2001*

Constituent	Reference for applicable standard	Maximum compliance schedule allowed	Compliance date and Basis
Cyanide (CCC of 1 ppb)	CTR	5 years	<b>May 18, 2003</b> because background date not adequate. Time needed to collect more background and possibly for SSO ( <b>plus 5-yr</b> in finding not to go beyond May 18, 2010). Basis is SIP 2.2.2.
Copper (salt), Chromium (III), Selenium	CTR (NTR for Se)	5 years	<b>5-yr from effective date of permit</b> (but not to go beyond May 18, 2010). Basis are CTR and SIP.
Copper (fresh), mercury, nickel, zinc, arsenic, cadmium, chromium (VI), lead, silver (CMC)	Numeric Basin Plan using SIP methodology	10 years	<b>March 31, 2010</b> , which is 10 years (using full months) from effective date of SIP (April 28, 2000). Basis is the Basin Plan, see note [1].
Dioxins/Furans, Tributyltin, other toxic pollutants not in CTR	Narrative Basin Plan using SIP methodology	10 years	<b>10-yr from effective date of permit</b> (which is when new standard is adopted; no sunset date). Basis is the Basin Plan, see note [1].
Other priority pollutants on CTR and not listed above	CTR	5 years	<b>5-yr from effective date of permit</b> (but not to go beyond May 18, 2010). Basis is the CTR and SIP.

[1] The Basin Plan provides for a 10-year compliance schedule for implementation of measures to comply with new standards as of the effective date of those standards. This provision has been construed to authorize compliance schedules for new interpretations of existing standards, such as the numeric and narrative water quality objectives specified in the Basin Plan, if the new interpretations result in more stringent limits than in the previous permit.

a. For numeric objectives, due to the adoption of the SIP, the Regional Board has newly interpreted these objectives. The effective date of this new interpretation is the effective date of the SIP (April 28, 2000) for implementation of these numeric Basin Plan objectives.

b. For narrative objectives, the Board must newly interpreted these objectives using best professional judgement for each permit. Therefore, the effective date of this new interpretation will be the effective date of the permit.